



Open Petascale Libraries (OPL) Project, Initiated by Fujitsu, Appoints NAG as Project Librarian

The Open Petascale Libraries (OPL) project, initiated by Fujitsu and announced at Supercomputing 2010, has appointed the Numerical Algorithms Group as the OPL Project Librarian.

NAG will be the custodian of the library source code and will be producing periodic binary releases, as well as providing some of the algorithmic content. NAG will also work with the other project members to formulate and maintain documentation and coding standards for the libraries and will ensure that code accepted for inclusion follows these standards.

The OPL project has been initiated by Fujitsu with the aim of developing mathematical libraries that will play an important role for scientific applications running on the next generation petascale supercomputers. The project will adopt a hybrid parallel programming model, which is necessary to take advantage of today's multi-core supercomputers. By using the numerical components generated through this project, it will be possible for application developers to more easily harness the potential of petascale supercomputers.

NAG has over 40 years of experience in developing and managing numerical libraries and in providing numerical components to many major hardware and software vendors. NAG is also involved in collaborative ventures with universities around the globe to help develop and advance numerical methods for the latest and upcoming parallel computer architectures.

High Performance Computing has recently entered the petascale era, where the world's fastest machines are capable of achieving performance in excess of one petaflop, i.e. one quadrillion (ten to the power of 15) floating point operations every second. Because of this speed, the impact of HPC is growing dramatically as more and more scientific and engineering problems are tackled through computer simulation.

Fujitsu is pioneering new software developments designed to exploit petascale-class computers. The focus is two-fold — working at the numerical library level, and contributing to strategic applications

in the areas of the environment, energy and health. The OPL project is being established by ten initial participating organisations, including companies, universities and research institutions from Europe, the US, Asia and Oceania. In addition, the OPL project is expected to attract the participation of additional organisations that agree with its goals and can contribute to achieving them.

“NAG is home to one of the most reliable and knowledgeable groups of numerical experts in the world and is exceptionally well-suited to be the OPL Librarian and to guide its development,” said Dr. Ross Nobes, Research Manager at Fujitsu. *“NAG’s longstanding reputation, the quality of the NAG organization’s developers, software and approach, made it the natural choice to be the custodian within the Open Petascale Libraries project.”*

“NAG is virtually unique in that we have four decades of experience in developing, maintaining and enhancing high-quality numerical code”, said Mike Dewar, CTO of NAG. *“Making effective use of petascale systems is extremely challenging, even for experts in High Performance Computing. High-quality, reusable components such as those envisioned for the Open Petascale Libraries are essential if we want to make these machines accessible to a wide range of scientific users.”*

About NAG

With origins in several UK universities, the Numerical Algorithms Group (NAG, www.nag.com) is a not-for-profit organisation that collaborates with world-leading researchers and practitioners in academia and industry. NAG serves its customers from offices in Oxford, Manchester, Chicago, Tokyo and Taipei, through field sales staff in France and Germany, as well as via a global network of distributors. NAG provides high-quality computational software and high performance computing services to tens of thousands of users, from Global 500 companies, major learning academies, the world’s leading supercomputing sites, numerous independent software vendors and many others.

About Fujitsu

Fujitsu is a leading provider of ICT-based business solutions for the global marketplace. With approximately 170,000 employees supporting customers in 70 countries, Fujitsu combines a worldwide corps of systems and services experts with highly reliable computing and communications products and advanced microelectronics to deliver added value to customers. Headquartered in Tokyo, Fujitsu Limited (TSE:6702) reported consolidated revenues of 4.6 trillion yen (US\$50 billion) for the fiscal year ended March 31, 2010. For more information, please see:

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