

HP Offers Researchers a Bold New Choice with 11.8-teraflop Supercomputer

April 5 2005

HP today announced that the U.S. Department of Energy's new state-of-the-art research supercomputer has completed a two-year acceptance process by the agency's Pacific Northwest National Laboratory (PNNL). The product of an intensive collaboration between HP and PNNL, the 11.8-teraflop, Linux-based supercomputer was designed specifically for computational biology and chemistry research, and is one of the fastest in the world for those applications.

It boasts power of nearly 2,000 1.5-gigahertz Intel Itanium 2 processors that have the ability to communicate with each other in less than three micro-seconds. It also has 6.8 terabytes of local memory.

Scientists already are using a variety of applications on the supercomputer to analyze and compile data regarding geochemical modeling, heavy element chemistry, modeling of chemistry on porous sites, groundwater flow simulations, nanosize particle modeling, and evaluation of molecular thermodynamics, kinetics and prediction of excited states.

"The HP and PNNL collaboration is a good example of how industry and research laboratories can partner to create unique solutions to national problems," said Dr. George Michaels, director of the Computational and Information Sciences Directorate at PNNL. "Our collaboration has resulted in building a supercomputer that will enable scientists to integrate and access data at an unprecedented rate, transforming their ability to do detailed computer modeling on a whole host of subjects. Research scientists from around the world will be able

to make use of its power."

Bill Mutell, senior vice president of Worldwide Public Sector, Health and Education at HP, said, "The collaboration between HP and the Department of Energy's Pacific Northwest National Laboratory exemplifies HP's strategy of working in partnership with our customers, while applying our long-standing commitment to serious R&D and the creation of advanced computing systems. This supercomputer will help open new avenues of scientific inquiry around the globe."

The Pacific Northwest National Laboratory (PNNL) in Richland, Wash., is one of nine U.S. Department of Energy (DOE) multi-program national laboratories. PNNL is operated by Battelle on behalf of DOE's Office of Science. In addition to supporting the research and education of future scientists and engineers, PNNL focuses on delivering breakthrough science and technology to meet key national environmental, energy, health and national security objectives. The DOE's William R. Wiley Environmental Molecular Sciences Laboratory, located on the campus of Pacific Northwest National Laboratory, is widely regarded as the premier laboratory for computational biology and chemistry.

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