

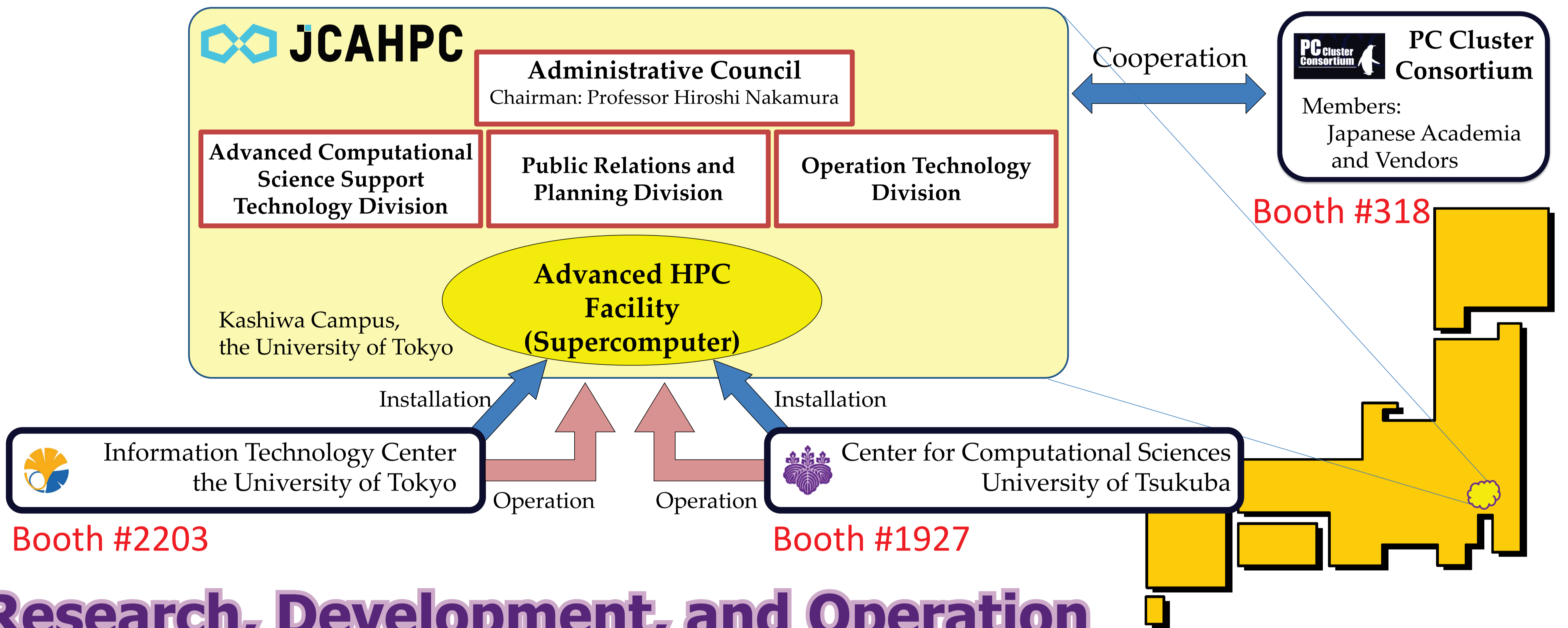
Joint Center for Advanced HPC

Information Technology Center
University of Tokyo

Center for Computational Sciences
University of Tsukuba

About Us

The Center for Computational Sciences at the University of Tsukuba and the Information Technology Center at the University of Tokyo established a new organization, called the **Joint Center for Advanced High Performance Computing (JCAHPC)**, in order to design, operate and manage a next-generation supercomputer system provided by both two universities. JCAHPC promotes advanced computational sciences, and contributes to the fields of academia, science, and technology.



Research, Development, and Operation

The members of JCAHPC design and develop a large-scale HPC system in which an operating system, programming languages, numerical libraries, and etc. for many-core architectures are exploited. Such research and development will proceed in establishing alliances with other organizations at the heart of the system software.

Based on this design and development, two institutes will jointly procure, operate, and administer the new supercomputer. The machine, which will have more than 25 Peta Flops and above peak performance, is scheduled to be operated around October 2016. After the system is operational, both institutions will use the system proportionally based on computation volume, operate their portions separately, and offer services to users. This arrangement not only reduces administrative costs, but also enables computing at a larger-scale than the case where each institution independently owns a supercomputer system. This effort represents the first attempt to create such a facility in Japan, as well as the first attempt in Japan to jointly operate and administer a supercomputer.

Distribution

The latest products developed by the members, XMP programming language, ppOpen-HPC numerical library, MPICH/DCFA communication library, and McKernel operating system, are distributed as open source software.

Procurement Schedule (Tentative)

