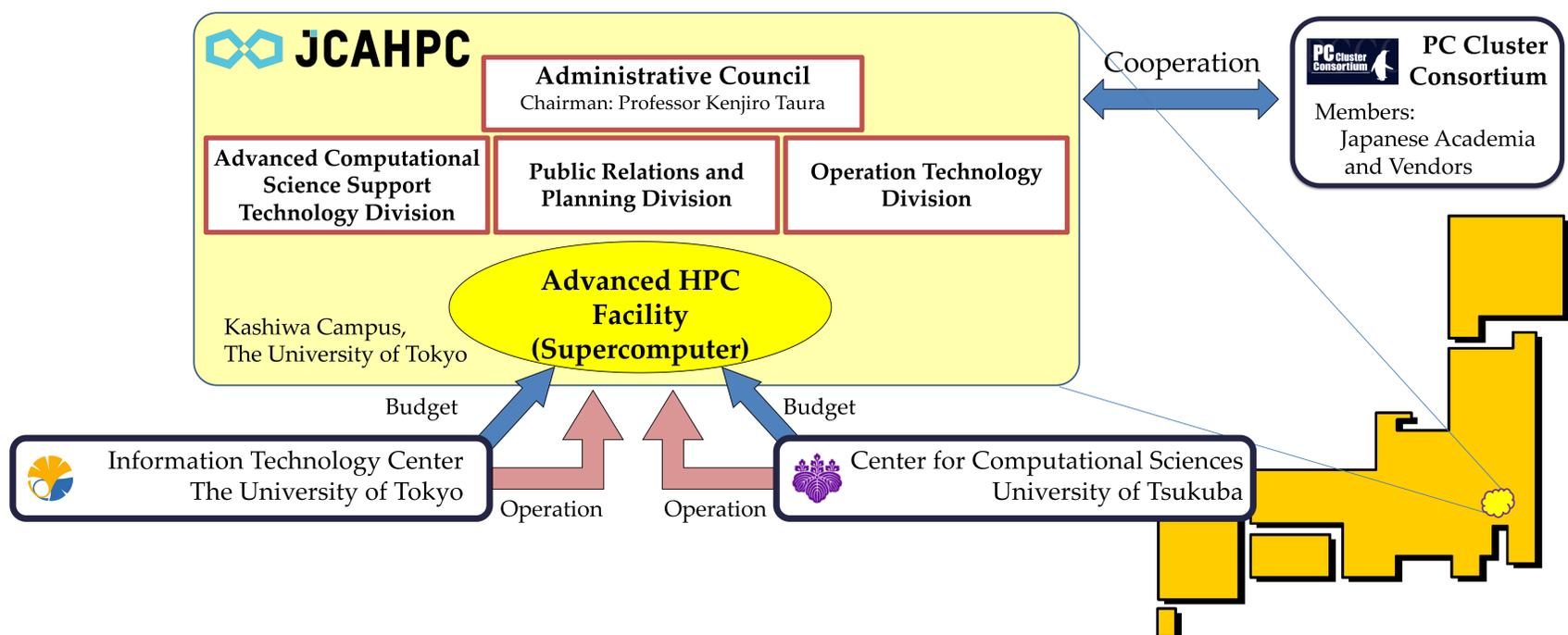


Joint Center for Advanced HPC

About Us

Joint Center for **A**dvanced **H**igh **P**erformance **C**omputing (**JCAHPC**) was established in April 2013 under agreement between Center for Computational Sciences (CCS) at University of Tsukuba, and Information Technology Center (ITC) at The University of Tokyo.

The primary mission of JCAHPC is to design and develop supercomputer systems collaboratively by faculty and staff members from both CCS and ITC, and to build and operate advanced large-scale high performance computing systems. It is expected to contribute to dramatic development of new frontiers of various field of studies, including computational science and engineering (CSE).



Research, Development, and Operation

CCS and ITC have been collaborating on the research for system software for many-core system, programming languages, numerical libraries, and large-scale applications. Based on the knowledge obtained by these research and development, JCAHPC will cooperate for the procurement, installation and operation of the supercomputer system under JCAHPC agreement. The Oakforest-PACS has been offered to researchers in Japan and their international collaborators through various types of programs operated by the High-Performance Computing Infrastructure (HPCI), by MEXT's Joint Usage/Research Centers, and by each of CCS and ITC under their individual supercomputer resource sharing programs using the CPU-node time based on the budget ratio. A single shared system such as Oakforest-PACS not only saves the costs for management but also enables larger scale computation than introducing a system on each center. JCAHPC is the first attempt to establish the joint center and introduce a shared single supercomputer system by multiple national universities in Japan.

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.