

The Cybermedia Center, Osaka University



The **Cybermedia Center** at Osaka University was founded after reforming the former Computation Center, the former Education Center for Information Processing, and a part of the library, in April 2000. Such reforms were conducted in order to comprehensively promote educational study in view of rapid developments in the field of information technology.

The work of our Center is twofold: 1) to continue providing stable infrastructure services and technical knowledge about **supercomputers**, information education systems, and networks used around the world, and 2) to pursue research that provides the most advanced infrastructure services.

As an infrastructure services facility

We have managed **supercomputing services**, LINUX rooms, and CALL (Computer Assisted Language Learning) rooms. The LINUX rooms adopted a diskless system in 2005 to make a safer and more flexible system. The CALL rooms have been used effectively and efficiently, and we have increased the amount of personal computers by three times the amount we had five years ago. Recently, we have emphasized diffuse course management systems, one of which was originally developed by our faculty, to support improved relationships among students and between students and faculty. ODINS (Osaka Daigaku Information Network System) in cooperation with other faculties, has introduced a stronger firewall to make the system better and safer.

As a research facility

We have focused on promoting interdisciplinary research using information technology while working with other graduate school faculties; namely: the Graduate School of Science, the Graduate School of Engineering, the Graduate School of Information Science and Technology, and the Graduate School of Language and Culture. Currently, we are conducting R&D for **Grid middleware** to integrate observation devices such as the ultra-high voltage microscope, large-scale storage and high-performance computing facility for science. Grid technology enables integration of science and IT by forming an integrated science. On-going examples of this are **JGN2 at NICT** (<http://www.jgn.nict.go.jp/>), and the **Biogrid project** in Japan (<http://www.biogrid.jp>), for example.

A New Supercomputing System: NEC SX-8R

