

DIPC Supercomputing Center

The Supercomputing Center at DIPC is its great strategic infrastructure and serves as a fundamental tool for the excellent research carried out by our researchers

Computational physics and chemistry are among the strongest research fields in the Basque Country and the Supercomputing Center is one of its key resources. With its current level of physical, human and technical resources this high performance computing (HPC) center has become a focus of technological knowledge, training, and innovation. Its status and influence transcend its primary mission, not only as a tool but also as a discipline in itself. There is no more powerful computing center of its type in the Basque Country.



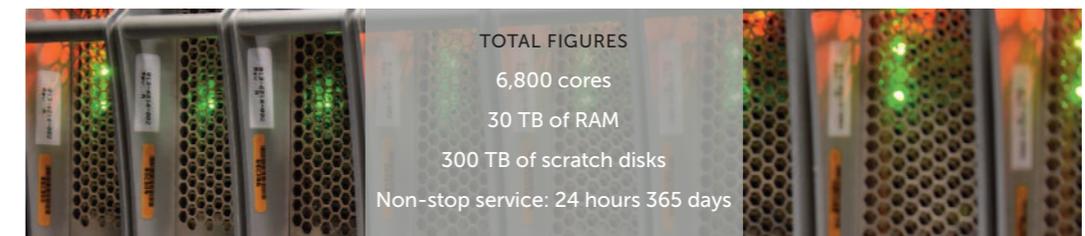
"The variety and power of the computing resources of DIPC, and its constant upgrade, allow the permanent confrontation of a wide range of numerical simulations that put DIPC at the forefront in research."

Txomin Romero Asturiano
Director of the Supercomputing Center

Current computing resources

The Center has three rooms to host the HPC systems. These rooms have an isolated electrical connection, communications infrastructure, humidity, electricity consumption and temperature control sensors, various uninterrupted power supply systems, refrigeration systems, automatic fire-extinguishing systems and intrusion detection.

As of 2016, the Center has six different supercomputers covering a wide range of computational needs, from Xeon E5-2680 V3 nodes with 24 cores, 256 GB of RAM and Infiniband FDR connection, large shared memory computers with 1024 cores and 4 TB of RAM in a single operating system image, to nodes with NVIDIA Geforce GPU technology for GPGPU programming or Xeon Phi technology.



More than 140 researchers from DIPC and other research centers such as the UPV/EHU, the CSIC-UPV/EHU Materials Physics Center, CIC nanoGUNE or Ikerbasque used this computational infrastructure in 2016.

