

High Performance Computing Resources

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Location: Cotanche Building

Established: 1999

Website: <http://www.ecu.edu/itcs/hpc>

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Purpose: East Carolina University's High Performance Computing (HPC) environment provides solutions specifically optimized for performing complex technical research computing jobs. HPC, also known as Research Computing or Scientific Computing, exists to execute tasks which exceed the capability of desktop computers, whether sorting large datasets, solving complex numerical problems, or repeating large calculations.

Equipment Available: **SGI Origin 350 (Zeus)**
(32) MIPS 800mhz R16000 Processors
32GB main memory
1.2TB disk space
SGI IRIX

SGI Prism (Coffee)
(8) Intel Itanium2
Processors
16GB main memory
320GB disk space
SuSE Linux with SGI
ProPack extensions

SGI Altix 4700 (Jasta) – planned for 2007
(64) Itanium2 Dual Core for a total of 128 Processors
256GB main memory
10.2TB disk space
SuSE Linux with SGI ProPack extensions

Capabilities: Please see the HPC web site for detailed capabilities: <http://www.ecu.edu/itcs/hpc>. The Origin 350 and Prism systems outperform available Linux machines for most interactive applications. They have been the mainstay of our HPC facilities for more than four years, and will continue service as part of ECU's HPC backbone for the foreseeable future.

ECU is in the process of reconfiguring and augmenting its HPC facilities with the planned addition of an Altix 4700. The flagship of SGI's new generation of supercomputers, the Altix 4700 will be incorporated into a research cluster environment, with an SGI Prism used as an interactive front end. The Altix will serve as ECU's primary batch processing system while interactive applications will continue to be run through the SGI Origin350.