Computación - Cáculo Intensivo

- Actualizado (11.07.2011)

O CESGA dispón de servidores de cálculo de diferentes arquitecturas para permitir ao investigador elexir sempre a arquitectura que mellor se adecúe ás súas necesidades de cálculo.

Sistemas de computación instalados no CESGA:

- FINIS TERRAE: para acceder execútase a orde: ssh ft.cesga.es
- SVG: para acceder execútase a orde: ssh svgd.cesga.es
- HPC 320: para acceder execútase a orde: ssh sc.cesga.es
- SUPERDOME: para acceder execútase a orde: ssh sd.cesga.es
- GRID: para acceder execútase a orde: ssh svgd.cesga.es
- Histórico

As comunicacións internas do Centro realízanse sobre redes ATM, ETHERNET e GIGABIT ETHERNET.

Estes equipos foron cofinanciados pola Xunta de Galicia, CSIC, CICYT e FEDER. As comunicacións internas do Centro realízanse sobre redes ATM, ETHERNET e GIGABIT ETHERNET.

Datos técnicos dos sistemas instalados

FINIS TERRAE

Architecture
Cluster SMP NUMA

Number of Processors
2.528

Type of Processor
Intel IA 64 Itanium 2 Montvale Dual Core 1.600MHz(6.4 Gflops)

Peak Performance
15.360 GFLOPS

Interconnect
Infiniband 4x DDR 20 Gbps

Memory
19.670 GB

Disc
390.000 GB

OS
Unix, Linux, Windows

Year Installed
2007

HP Cluster Superdome

Architecture
2 nodes SMP Cluster

Number of Processors
128

Type of Processor
Intel Itanium2, 1500 MHz, 6 Mbytes cache

Peak Performance
768 GFLOPS

Interconnect
Infiniband

Memory
384 GBytes

Disc
7 Terabytes

OS
HP-UX

Year Installed
2003

Compaq HPC 320

Architecture
Cluster of 8 SMP servers

Number of Processors
32

Type of Processor
Alpha EV68 1 GHz

Peak Performance
64 GFLOPS

Interconnect
Memory Channel Dual Rail

Memory
80 GB

Disc
2 TB

OS
Tru64

Year Installed
2002

SVG

Architecture
PC Farm (Self Made), Beowulf Cluster

Number of Processors
Over 96 processors

Type of Processor
Intel Pentium III 1GHz up to P4 3,2 GHz

Peak Performance
528 GFLOPS (nodo CESGA)

Interconnect
Myrinet and Gigabit Ethernet

Memory
1GB - 2GB per node

Disc
9 up to 160 GB per node (over 12TB global)

OS
Linux

Year Installed
2000 (first stage)

GRID

Architecture
Blades Dell PowerEdge 1955

Number of Processors
40

Type of Processor
Intel quad-core:
36 Intel Xeon 5130 1.6GHz
4 Intel Xeon 5355 2.66GHz

Peak Performance
2183 GFLOPS

Interconnect
Gigabit Ethernet

Memory
4GB (nodos Xeon 5130)
8GB (nodos Xeon 5355)

Disc
SAS 73.4GB (nodos 5130)
2x SAS 73.4GB (nodos 5355)

OS
Linux

Year Installed
2007