

Computing Resources

- [Data Preservation](#)
- [Hardware Resources](#)
- [Cloud Computing](#)
- [GRID Computing](#)
- [High Performance Computing](#)
- [Servicio Santander de Supercomputación \(SSC\)](#)

Compute Nodes

The IFCA Computing infrastructure consists of a total of four general services nodes, based on Intel x86 architecture, interconnected into a 10Gb network offering multiple options and processing architectures.

More specifically, the services consists of:

- **AI/machine learning** - It has 24 computing nodes and offers a total of 1,640 CPU cores, 2,600 Gb of central memory and 40 NVIDIA GV100GLGP card 32Gb (with Infiniband EDR 100Gbps), 11 NVIDIA 1080Ti card and 1 NVIA TitanX card.
- **Cloud** - It has 158 computing nodes and offers a total of 4,734 CPU cores with 8,256 Gb of RAM in different brands machines.
- **HPC (Altamira node)** - It has 158 computing nodes and offers a total of 5,056 CPU cores with 10,112 Gb of central memory, interconnected into a single Infiniband FDR10 network (40Gbps)
- **Grid** - It has 108 computing nodes and offers a total of 3,328 CPU cores and 11,648 Gb of RAM in different brands machines.

More information: [Hardware Resources](#)

Storage Space

In addition, the system offers 1,6 Pb storage space through IBM's General Parallel File System (GPFS), 400Tb storage space through Ceph File System (CEPH) and the infrastructure is complete with an IBM TS3500 library of maximum storage capacity of about 6 Pb.