
Status of the Cinvestav Cluster

Brief Report

D0SAR

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Hardware and Timeline

We purchased the hardware two years ago. At that time was state of the art.

We have a File server. Dual CPU with 1GB of memory and 8 SCSI Disks (Hot Swaps): 8x80 GB, in a Raid array (Raid 5). It became a Sam Station at the beginning of this year.

There are 15 nodes with Dual CPUs each. 512 MB of memory and 30 GB on Disk. CPUs are 866 MHz Intel processors.

The local network is connected via a 100 Mbps hardware (3Com)

We are connected to the internet via an E3 link (34 Mbps) with an internal limit of 10 Mbps.

What do we do with the Cluster?

- **Basically we do:**

- 1) MC for the B Physics group. The whole chain, generation, D0gstar and reco.
- 2) Cinvestav needs for MC. Small analysis jobs.
- 3) We keep 3,4 releases, depending on space. 70 GB each. We use p14.02.xx in our MC jobs.
- 4) The fileserv can compile with KAI or gcc. The nodes can not. They can run the binaries.
- 5) We use PBS to handle the job requests.
- 6) At the moment the usage is split as 90% D0 and 10% FOCUS.

The Future

- **We are submitting a grant proposal for 100K USD for an upgrade of the Cluster. We envision a 3 times improvement, in memory, number of nodes and File Server capability. No guarantee of getting the money but we will see ...**
- **We feel very comfortable with the Cluster and we can modify it according to needs.**