



BUE Grid Node

Status and Specifications

By Yasser Ahmad

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1. BUE Grid Objectives and current status

A- The system is intended for running parallel programmes. . Shared memory codes can be run on single blades or workstation. In some cases these can automatically parallelized in an efficient manner using the installed Sun Studio software .Distributed memory codes supporting Open-MPI can also be run (the system has been tested on several such applications, including the cosmological simulation code [Gadget2](#)

B- Using Geant4 software which has a variety of biomedical applications.

C- In order to gain more access to CMS Data and analysis

2- BUE Grid Specifications

- 4 Sun Blade Servers each with 8 cores
- 8 Sun *ultra 24* workstations each with 4 cores
- 1 Sun Storage 7110 with Capacity: 11.5 TB
- 2 switches with 24 ports
- 100 Mb/s internet bandwidth

3- Problems

A- We are waiting for to the new budget – which is expected soon - to enhance our resources by increasing the storage capacity to 40 TB and 24 CPU servers with quad cores for a better use of CMS database.

B- The internet bandwidth is limited to 100 Mb/s.

4- Future Plan

1- Achieving 40 Tb Storage and 24 CPU servers with quad cores

2- We target enlarging BUE capacity to 100 TB and 32 CPU with the help from the BUE.

3- Increasing the internet bandwidth to 500 Mb/s

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Thank You