

CMS Tier-2 Resource Management

Monday, March 23, 2009 8:00 AM (20 minutes)

The Tier-2 centers in CMS are the only location, besides the specialized analysis facility at CERN, where users are able to obtain guaranteed access to CMS data samples. The Tier-1 centers are used primarily for organized processing and storage. The Tier-1s are specified with data export and network capacity to allow the Tier-2 centers to refresh the data in disk storage regularly for analysis. A nominal Tier-2 center will deploy 200 TB of storage for CMS. The CMS expectation for the global Tier-2 capacity is more than 5 PB of usable disk storage. In order to manage such a large and highly distributed resource CMS has tried to introduce policy and structure to the Tier-2 storage and processing.

In this presentation we will discuss the CMS policy for dividing resources between the local community, the individual users, CMS centrally, and focused CMS analysis groups. We will focus on the technical challenges associated with management and accounting as well as the collaborative challenges of assigning resources to the whole community. We will explore the different challenges associated with partitioning dynamic resources like processing and more static resources like storage. We will show the level of dynamic data placement and resource utilization achieved and the level of distribution CMS expects to achieve in the future.

Presentation type (oral | poster)

oral

Primary author: Dr KRESS, Thomas (RWTH Aachen, III. Physikal. Institut B)

Presenter: Dr KRESS, Thomas (RWTH Aachen, III. Physikal. Institut B)

Session Classification: Poster session

Track Classification: Distributed Processing and Analysis