

**Joint EGO CNAF/INFN CC-IN2P3/CNRS
Computing Committee (JECC)**

2th meeting

7rd November 2005 audioconference Cascina-CNAF Bologna-CC-In2p3 Lyon

Meeting Minutes

All the JECC components are present:

Marie-Anne Bizouard (VIRGO representative)
Stefano Cortese (EGO Head of Computing Department) - *Chairman*
Dominique Boutigny (CC-IN2P3 Director)
Mirco Mazzucato (CNAF Director)
Filippo Menzinger (EGO Director)
Fulvio Ricci (VIRGO representative)

In addition Luca Dell'Agnello was also present as technical reference for CNAF-Bologna and Jean-Yves Nief for CC-IN2P3

Topics:

- 1. Increase the frequency of the JECC meeting**
- 2. 2005 utilization and accounted costs**
- 3. Proposal to increase the resources usage**
- 4. Requests for 2006**

1– Periodicity of the JECC meeting

In order to have a better estimate of the final yearly cost the Committee agrees to keep an additional meeting at mid-year (around May of every year), so that the estimate could fit in the EGO budget estimates of the mid-year EGO Council session.

2– 2005 utilization and accounted costs

The utilization has been lower than foreseen because of the smaller number of Virgo run days. There has also been a difference in the amount of utilization between the two centers. Here there is the breakdown that will be billed through direct invoices to EGO:

2.1- CC-Lyon

Here we have a total CPU usage extrapolated to the end of the year of 4580 KSI2K.days that means about what had been foreseen.

The cost will be billed at 1.4€ per KSI2K.day for about 6400€ + VAT

The storage increment for 2005 was of 10TB (-40% respect to forecast) but the data access has been improved in the second half of the year by increasing with 2TB the HPSS disk cache at the cost of 7000€ per TB.

The total cost (including the tapes) will be around 24000€ + VAT

In addition the CC-Lyon has joined the Virgo GRID Virtual Organization and it is able to account the Virgo jobs submitted through GRID.

2.2 CNAF-Bologna

The CPU utilization has been conditioned by the accessibility of the data and the difficulty for Virgo users to have a stable working environment during the changes to the computing and storage system performed at the CNAF center.

The accounting system coming with LSF has been installed but it is not accessible to users yet.

The GRID accounting system is operational from September.

Therefore the overall CPU usage is of 675 KSI2K.days that are billed as 1000€ + VAT.

The disk space was increased by 10TB and, considering a degree of unavailability due to storage problems, it is billed in 8000€ + VAT.

3 – Proposal to increase the resources usage

It is agreed that to increase the computing activity in Lyon the access speed to HPSS data could be improved by using intelligently the disk caching of Virgo data.

The proposal of Lyon system engineers is to test rapidly the XrootD caching software without increasing the disk cache.

To increase the utilization of the computing and storage system in Bologna it is mandatory that CNAF provides to Virgo users a support service that maintains a stable working environment based on the current paradigm in use at Cascina (basically NFS access with Virgo made catalogs)

It is agreed that CNAF will provide for 2006 an FTE for this task.

4 – Requests for 2006

From the attached document on the Virgo Computing needs for 2006 come the following.

The estimated foreseen costs according to these requests should be provided promptly by the Computing Centers.

4.1 – Storage

67 TB per center (of which 15 in the first half of the year).

It is requested also a *scratch working area* for Virgo users of **5 TB** at CNAF and **500GB** in Lyon.

In addition it is requested that a *backup copy on tape* of Virgo data will be held in Bologna and in Lyon.

At Lyon it is requested an *additional tape drive* dedicated to Virgo data.

4.2 – Computing

7000 KSI2K.days for Bologna and 6000 KSI2K.days for Lyon are requested.