LCG Service Report – November 6 2006 (Week 45)

General Status

The total outgoing SC4 traffic has ranged from at least 550 to at least 700 MB/s as daily average, with peaks of 1 GB/s or more for some hours. The real numbers are estimated to be up to 30% higher. We are working with the R-GMA developers to try and understand how tomcat on the MON box gradually slows down.

CMS are still running their CSA'06 Challenge and have reached the phase marked as T0 operations rampdown, but the export rates have still been high this week (more than 200 MB/s).

Alice have run at more than 100 MB/s for a week, with peaks of 300 MB/s.

The remainder basically was the usual "dteam" background traffic with occasional blips for LHCb or Atlas.

GridView got stuck twice due to problems with the RACs. IT-PSS group have proposed work-arounds at the application level, also for the FTS.

The FTS web service got stuck twice due to a problem with the pooling of connections to the RACs. A Lemon sensor has been installed to recognize the condition and trigger restart of tomcat. The problem has now been found and a fix will be prepared.

On Wed. the transfers for Alice and LHCb failed for a few hours after an upgrade of their CASTOR instances. The remedy was to restart the gridftp daemons for them to pick up the new CASTOR client library.

File Transfer Report

CMS Transfers

CMS report good results from their Tier1-Tier2 transfer tests, as described below (from Michael Ernst):

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Over the course of the last days we were focusing on improving
Tier-1 to Tier-2 transfers and achieved some remarkable and very
stisfactory results. We have seen rates from some Tier-1s (e.g. FZK
to DESY) up to 200MB/s sustaining multiple hours and were able to
replicate datasets simultaneously from a particular
Tier-1 (i.e. PIC) to 18 different Tier-2s almost error-free.

These transfer tests that were carried out systematically (datasets
were replicated from any Tier-1 to all Tier-2's participating in
CSA06) have shown that the CMS data model is viable regarding the
strategy that allows any CMS Tier-2 to request data from any CMS
Tier-1.
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Regarding job execution we succeeded in getting more sites involved in the CSA06 analysis processing activities and the total job volume is now approaching 30k jobs/day. The efficiency (grid job submission + application) is above the goal of 90%.

ATLAS Transfers

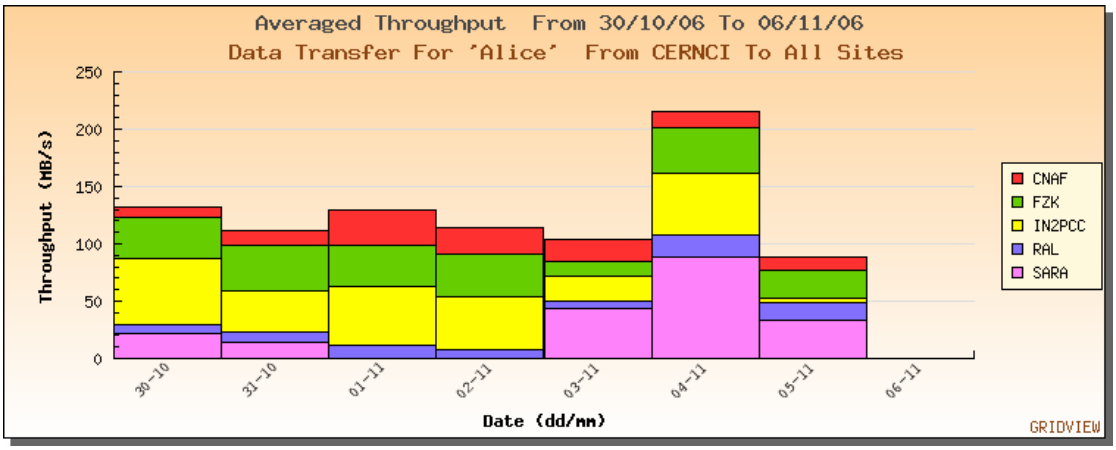
Regarding the planned 300MB/s CERN-BNL tests:

From Bruce Gibbard: *It is believed that both hardware (dCache write node configurations) and software (to dCache 1.7.0) upgrades currently in the works will have to be completed before such a test can be done with a reasonable chance of success. The completion of these upgrades is currently scheduled for the first of the year. Therefore I don't think such a test would be possible until sometime in January at the earliest.*

ATLAS Tier0-Tier1 transfers have been rather unstable over the past week, with many failures due to 'Source SRM'.

ALICE Transfers

Site stability is still a problem, as can be seen from the following graph:



However, daily averages, when corrected for the problems with the GridView chain (see above), still compare favourably with pp and HI targets.

A detailed log can be found at
https://twiki.cern.ch/twiki/bin/view/LCG/AliceTransfers.