Subject: [LCG MB] Fwd: Metrics for measurement of tape performance
From: Alberto Aimar <alberto.aimar@cern.ch>
Date: Wed, 09 Jan 2008 15:06:28 +0100
To: "worldwide-lcg-management-board (LCG Management Board)"
<worldwide-lcg-management-board@cern.ch>
CC: Tim Bell <tim.bell@cern.ch>
BCC: alberto.aimar@cern.ch

Hello.
    as agreed at the F2F MB Meeting yesterday below the metrics for measurement of tape performance for
CERN.
Please send your comments with Tim in CC.

Regards.
Alberto.

-------- Original Message --------
Subject: Metrics for measurement of tape performance
Date: Wed, 9 Jan 2008 13:51:14 +0100
From: Tim Bell <tim.bell@cern.ch>
To: Alberto Aimar <Alberto.Aimar@cern.ch>
CC: Tony Cass <Tony.Cass@cern.ch>

Alberto,

As requested in yesterday's face to face meeting, here are the definitions of the metrics which we will be
recording at the Tier-0 during the CCRC. Please circulate these to the F2F distribution list.

Metric
Description

Total Rate
The total volume of data transferred divided by the number of seconds that a drive is occupied serving the
request. This includes mounting and positioning time, data transfer time and unmounting time. It is
expressed in MB/s.

File Size
The average file size in MB transferred to or from the tape drive. The performance of tape drives varies
according to the file size. The larger the file size, the higher the drive performance since it is able to
achieve full data streaming. Smaller file sizes require the drive to stop/start more frequently, reducing
performance as well as increasing wear and tear on the drives and tapes.

Tape Repeat Mounting
The remounting metrics track the share of mounts for tapes which have already been mounted more than 5
times during that day. When the migration and recalling strategies are working well, this should be a low
percentage.
A tape mount and positioning takes between 3 and 5 minutes and the tape drive is not being used for data
transfer during this period so a large number of repeat mounting wastes potential data transfer time.

Data Transferred / Mount
The volume of data in MB transferred on average for mounts during the day. Higher values indicate that
the work for mounting is being effectively used.

Thanks,

Tim

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