EOS workshop



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A brief overview of the CTA mount scheduling logic

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Accessing data in a tape archival system can be costly in terms of time. The time taken to mount a tape into a drive, to position the tape head to a file and to unmount the tape when this file has been read can take more than 2 minutes.

A tape drive cannot be used to archive or retrieve data during the mounting and unmounting of a tape. We therefore need a solution to avoid mounting a tape when it is not worth it. Indeed, imagine a user who retrieves a single file from a tape and then 5 minutes later wants another file from the same tape. Without the CTA scheduling logic, the drive would lose twice the amount of mount, unmount and positioning time! A CTA tape server contains the scheduling logic that decides when to mount a tape in order to optimise drive usage for reading and writing data.

The aim of this presentation is to explain the different elements taken into account by the scheduler of each CTA tape server to decide whether or not a tape is worth mounting.

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