dCache with tape storage for High Energy Physics applications

Monday 23 March 2009 08:00 (20 minutes)

An interface between dCache and the local Tivoli Storage Manager (TSM) tape storage facility has been developed at the University of Victoria (UVic) for High Energy Physics (HEP) applications. The interface is responsible for transferring the data from disk pools to tape and retrieving data from tape to disk pools. It also checks the consistency between the PNFS filename space and the TSM database. The dCache system, consisting of a single admin node with two pool nodes, is configured to have two read pools and one write pool. The pools are attached to the TSM storage that has a capacity of about 100TB. This system is being used in production at UVic as part of a Tier A site for BaBar Tau analysis. An independent dCache system is also in production for the storage element (SE) of the ATLAS experiment as a part of Canadian Tier-2 sites. This system does not currently employ a tape storage facility, however, it can be added in the future.

Author: Dr AGARWAL, Ashok (University of Victoria, Victoria, BC, Canada)

Co-authors: Mr LEAVETT-BROWN, Colin (University Systems, Victoria, BC, Canada); Mr LESKE, Drew (University Systems, Victoria, BC, Canada); Mr REM-PEL, Evan (University Systems, Victoria, BC, Canada); Mr REITSMA, Hendrick (University Systems, Victoria, BC, Canada); Mr LEWALL, Kim (University Systems, Victoria, BC, Canada); Mr FRANSHAM, Kyle (University of Victoria, Victoria, BC, Canada); Dr SOBIE, Randall (University of Victoria, Victoria, BC, Canada); Mr ENGE, Ryan (University of Victoria, Victoria, BC, Canada)

Presenter: Dr AGARWAL, Ashok (University of Victoria, Victoria, BC, Canada)

Session Classification: Poster session

Track Classification: Distributed Processing and Analysis