HEPiX Fall 2014 Workshop





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New High Availability Storage at PDSF

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The PDSF Cluster at NERSC has been providing a data-intensive computing resource for experimental high energy particle and nuclear physics experiments (currently Alice, ATLAS, STAR, ICECUBE, MAJORANA) since 1996. Storage is implemented as a GPFS cluster built out of a variety of commodity hardware (Dell, Raidinc, Supermicro storage and servers). Recently we increased its capacity by 500TB by adding two file systems using NetApp E5600 series storage directly SAS attached to a pair of servers in a high availability configuration. Data IO routes to the cluster through dual 10Gb Ethernet. A 1Gb private network is used for monitoring and management.

We will describe the configuration, share observations from the deployment process and provide the initial performance results. One of the new file systems was used to replace the back-end of the Tier3 ATLAS Storage Element (Bestman in gateway mode). We will share our experiences related to that move.

Primary author: QUAN, Tony (LBL)

Co-authors: SAKREJDA, Iwona; BOTTS, James (LBNL); PEZZAGLIA, Larry (LBNL)

Presenter: QUAN, Tony (LBL)

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