The overall objective of the Next Generation I/O Project (NEXTGenIO) is to design and prototype a new, scalable, high-performance, energy efficient computing platform designed to address the challenge of delivering scalable I/O performance to applications at the Exascale. It will achieve this using highly innovative, non-volatile, dual in-line memory modules (NV-DIMMs). These...
The main objective is to create IOStack: a Software Defined Storage toolkit for Big Data on top of the OpenStack platform. IOStack will enable efficient execution of virtualized analytics applications over virtualized storage resources thanks to flexible, automated, and low cost data management models based on software defined storage (SDS). Major challenges...

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BigStorage: Storage-based Convergence between HPC and Cloud to handle Big Data
TONI CORTES ROSSELLO
The consortium of this European Training Network (ETN) "BigStorage: Storage-based Convergence between HPC and Cloud to handle Big Data will train future data scientists in order to enable them and us to apply holistic and interdisciplinary approaches for taking advantage of a data overwhelmed world, which requires HPC and Cloud infrastructures with a redefinition of storage...

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XTreemOS: Building and Promoting a Linux-based Operating System to Support Virtual Organizations for Next Generation Grids
TONI CORTES ROSSELLO
The overall objective of the XtreemOS project was the design, implementation, evaluation and distribution of an open source Grid operating system (named XtreemOS) with native support for virtual organizations (VO) and capable of running on a wide range of underlying platforms, from clusters to mobiles.

The approach proposed in this project was to...