"Lustre - the Inter-Galactic Cluster File System?"

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Abstract

The Lustre architecture (http://www.lustre.org) is a project on Linux clustering and storage management. It encompasses distributed storage on object based storage devices, the Lustre cluster file system and specialized, stackable storage modules.

In this talk we will start with an overview of the architecture. We then describe how Lustre attempts to deal with scalability and performance requirements, including a glimpse of the Linux kernel changes the project has had to make. We finish with an overview of where the project is today and what can be expected in the future.

Details can be found in the Lustre Book http://www.lustre.org/docs/lustre.pdf

Biography

Peter J. Braam is founder and president of Cluster File Systems, Inc, and specializes in storage, clustering and file system software. He is best known for his work on the Lustre project and on the Coda and InterMezzo file systems, which wan awards at LinuxWorld and the Open Source Convention in 1999. He received his PhD in 1987 and subsequently held tenured faculty positions at Utah and Oxford where he began to teach Computer Science in 1992. He joined Carnegie Mellon's faculty in 1996, and continues to be a courtesy faculty member. In 1999 he began to commit most of his time to the Linux industry as a part time Cluster and File Systems Architect for Red Hat while principally working for Stelias Computing, which worked on advanced Linux solutions with the Storage industry and National Laboratories. Cluster File Systems, Inc has attracted significant government funding for development of the Lustre file system.

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