Cray Launches Tiered Storage for Lustre

At the 2014 International Supercomputing Conference in Leipzig, Germany, global supercomputer leader Cray Inc. has announced the launch of a new data management and protection solution for Lustre file systems. This new capability is designed to simplify the management and preservation of data stored on Lustre, using Cray Tiered Adaptive Storage (TAS).

Designed for big data and supercomputing environments, the Cray TAS connector for Lustre provides customers with a simplified way to both protect and move data across storage tiers and locations, from high-performance storage to deep-tape archives. This new capability extends Cray TAS to the Lustre user community.

"Our customers can now deploy high performance Lustre storage systems knowing their data can be easily managed," said Barry Bolding, Cray's vice president of storage and data management. "Until now, it has been impractical to backup or protect large Lustre file systems with enterprise-class technologies. A key strategy for Cray is building on open systems. While other tiered storage systems are proprietary, we continue to invest in Linux and open format data movement technologies. The Cray TAS connector for Lustre will work on any Linux or Lustre environment, regardless of vendor."

Cray TAS is an open archive and tiered storage system that simplifies the preservation of data indefinitely, and sustains large-scale archives for big data and supercomputing. Building on Lustre APIs for hierarchical storage management, Cray has developed an essential bridge from high performance storage to archives, using a flexible tiered storage model. Data access is transparent to users, and storage tiers can be composed of any media (SSD, disk or tape). The management tools are easy to use and familiar to system administrators and SAM-QFS users. Yet, Cray TAS capabilities are built on Linux and designed for big data and supercomputing.

Some of these unique capabilities include:

- Large file system support for nearline disk tiers measured in petabytes;
- Massive archive capacity for tape tiers measured in exabytes;
- Migration policies based on quotas;
- Single-point support for all hardware and software;
- Growing ecosystem of Linux tools;
- Comprehensive best-practices and architectures based on years of SAM-QFS knowledge and expertise.

"Lustre is expanding into commercial and big data customers, and is the leading open parallel file system," added Bolding. "As a co-founder of OpenSFS, Cray leads and collaborates with the open source community to drive Lustre suitability for analytics, as well as supercomputing. Cray TAS now provides a path for customers to protect and archive the data that is important to them, while driving down total-cost-of-ownership by putting it on the most inexpensive media possible. Combined with other Cray storage solutions, such as Cray Sonexion and Cray Cluster Connect, we are working toward complete data storage and management offerings for the datacenter."

In addition to Cray TAS, the Company also offers Cray Sonexion, a scale-out Lustre system for high-performance storage, and Cray Cluster Connect, a complete, integrated Lustre storage solution for all x86 Linux clusters. Cray storage solutions address the full range of customer use cases from requiring high performance scalability to reducing the total cost of storing and managing data over its lifespan.

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