Customer Success Story

"We were bumping up against the capacity limits of our file systems weekly. F5 Acopia let us pool our storage, giving us the additional capacity we needed."

—Manager of Digital Asset Management

Highlights

Industry

- Media/Entertainment

Challenges

- Large video files regularly pushing existing file servers to their 16TB limits
- Deleting files manually freed up space temporarily, but was time-consuming and labor-intensive

Solution

- Clustered F5 Acopia ARX1000 systems
- Real-time load balancing policies aggregate multiple file systems

Benefits

- Created an application workspace that significantly exceeds the limitations of today's NAS devices
- Eliminated the need to encode and ingest the same file repeatedly
- Dramatically reduced time spent manually deleting files to free up storage space

Cable Giant Boosts Storage Utilization, Reduces IT Workload with F5 Acopia

As the leading provider of cable, entertainment and communications products and services in the United States, this company provides nearly 25 millions customers with a diverse range of cable, high-speed Internet customers, and voice services. The company develops, manages and operates broadband cable systems to deliver programming content.

The Challenges

Maxed-out File Servers and Time-intensive Manual Processes

The media center of this company is charged with providing Video on Demand (VOD) content to the field. Video assets flow into the center in a variety of file formats, via a range of delivery mechanisms, from multiple sources. High-definition files average about 6.6 gigabytes, while standard video files average 1.6 gigabytes.

As files arrive, they are encoded and ingested into a high-performance file server, tested, run through quality control and then moved to a Video Distribution System (VDS) on a second file system. When requested by the field, the VDS delivers the file via satellite. It's an efficient system that was being hampered by a 16 terabyte (TB) file system size limitation on the file servers. The size and sheer number of files caused the media center to frequently hit that limit, forcing the VOD operations staff to manually delete older files. When the deleted file was again in demand, the staff needed to go back to the beginning of the process and re-encode/re-ingest the file all over again. Just one hour of long-form content takes approximately 1 hour and 15 minutes to re-encode, assuming no edits. The media staff knew there had to be a better way to serve their customers.

"We wanted to build a state-of-the-art asset management system designed to ingest, manage and distribute video content for use throughout the cable industry. We needed a storage solution to grow and scale with our business," explained the Manager of Digital Asset Management.

The Solution

Intelligent File Virtualization with F5 Acopia

To accomplish those goals, the media center needed a solution that would overcome its file systems' size limitations. The IT team considered implementing a clustered file system to accomplish this goal, but ultimately selected F5 Acopia ARX systems as a more cost-effective, and less disruptive, alternative. F5 Acopia support for both CIFS and NFS protocols was another plus.

The company deployed a high availability pair of ARX1000 devices for its video asset archives and virtualized multiple file systems into a single Global Namespace. The ARX systems also provide real-time load balancing policies. This enabled the media center to create one large "virtual file server" from its existing file storage devices. By aggregating the capacity of the physical devices to create a larger application workspace, the F5 Acopia solution helped the media center get around the 16TB file system size limitations that had proven so disruptive.

Today, the IT organization defines a unique period of time that each video asset remains on the VDS. When its "lifetime" expires, the file is automatically moved to the Acopia devices and archived indefinitely. Should the file be recalled to the on-demand rotation, it can be easily moved back to the VDS. All movement is transparent to clients and applications.

The Results

Dramatically Improved Storage Utilization and More Efficient Operations

With the F5 Acopia solution, the cable firm's archiving capacity is currently 30TB with plenty of room to grow. In addition, the time-consuming task of manually deleting files has been eliminated.

Using the Acopia intelligent file virtualization solution has helped this company:

- Pool storage resources so existing capacity is efficiently used;
- Implement real-time dynamic load balancing policies, improving overall performance and eliminating the need to purchase additional storage;
- Free up IT resources for other business-critical projects.

Summary

Efficient Use of Storage Resources Improves Operations and Reduces Costs

Dynamic load balancing with F5 Acopia has allowed the cable giant to achieve its objective of creating an efficient video asset storage and distribution system that keeps files accessible while maximizing utilization of existing resources.

The intelligent file virtualization solution has helped the company keep storage costs in check and reduce the storage management workload for the IT staff.

"F5 Acopia has definitely helped us improve our workflow. Before Acopia, we had to delete files manually every week to free up space, but now we can efficiently archive assets to our Content Factory."

—Manager of Digital Asset Management

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