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CASE STUDY

MetroEast Community Media Empowers the Digital Community with StorNext

A leading community media provider in the Portland, Oregon area faced the challenge of helping community members create, broadcast, and protect memorable content. The answer was a storage environment built on Quantum's StorNext technology. The results were fast access to shared storage, higher performance, lower costs, and better protection.

MetroEast
COMMUNITY MEDIA

FEATURED PRODUCTS

StorNext® 5

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>
> **David Elkin-Bram**
> CIO, MetroEast

> With the QXS-1200, not only did we get much faster performance, but we figure that the system will pay for itself in just a few years with the savings.
>
> **David Elkin-Bram** – CIO, MetroEast

SOLUTION OVERVIEW

- StorNext® M440 metadata appliance
- StorNext QXS™-1200 disk storage
- StorNext AEL500 Archive

KEY BENEFITS

- High-performance Fibre Channel environment gives all users common access to shared storage for faster production
- RAID-based redundancy provides proven protection for content
- Disk systems increase performance and reduce costs through lower power and cooling requirements
- Compatibility with Active Storage and Apple environments makes transitions easy and protects user investment in content and knowledge
- Archiving system automatically protects work in progress, retains content for future use, and reduces the need for an active disk

Operating since 1984 in Gresham, Oregon, MetroEast Community Media is dedicated to strengthening and enriching the life of the community by using digital media to encourage active civic engagement and give expression to the widest possible diversity of voices. Its mission embraces the goal of making electronic media and broadcasting communications accessible to everyone, including underrepresented groups, to help them express their personal, political, and cultural ideas.

MetroEast trains members of the community in the use of digital media tools, loans equipment and studios to participants, and facilitates the broadcast of content on eight public access channels in the Greater Portland area, as well as over the Internet. With more than three decades of service, MetroEast has helped produce and broadcast an astonishing breadth of content, everything from city council meetings to community-created exercise programs and biblical exegesis.

SUPPORTING A WIDE RANGE OF CONTENT CREATION EXPERTISE

"Community media has a very different set of challenges than any other kind of broadcasting that I have been associated with," explains David Elkin-Bram, MetroEast's CIO. "We work with a huge number of different content creators, many of which start out knowing literally nothing about digital media creation, broadcasting, or editing—and we are only successful when they are."

In MetroEast's early days, digital production was carried out on editing stations that were managed essentially in isolation from each other. "People put content on removable drives, which were then carried around from station to station. It wasn't that uncommon to have them dropped—often destroying all the work," recalls Elkin-Bram.

SELECTING THE RIGHT SHARED STORAGE SOLUTION

So early on, the MetroEast team decided they needed to invest in upgrading to a system that could provide shared access to common storage resources for projects. In their search, they put a priority on transparent ease of use for their user base, compatibility with their Apple-based edit bays, keeping within their budget, and providing a system that could scale easily as demands increased in the future.

"We did technical searches, and talked to everybody we could think of in general broadcast and community media," says Elkin-Bram. Eventually, they narrowed down the choices to a specialized network-attached storage (NAS) system designed for video environments, a proprietary Ethernet-based storage and editing solution, and a Fibre Channel management system built on Quantum's StorNext technology.

At the time, the team decided that the Ethernet-connected RAID approach didn't have the performance and scale to support their needs. They also looked in great detail at the media-specialist NAS product, but ended up rejecting it. Elkin-Bram explains, "I wasn't crazy about its file-based approach to redundancy. It seemed too heavily reliant on software daemons running in the background, and we would have had to set up an InfiniBand network for back-end communication between disk systems." Pricing

and costs were also a problem. Quotes were all-inclusive, making it very hard to see what we were paying for and what might happen to the service component in the future."

STORNEXT PROVIDES OPTIMAL SOLUTION, GROWTH FOR FUTURE

The team liked the StorNext-based technology, supplied through Active Storage. "StorNext had direct Fibre Channel connections that could support the performance we knew we would need. It used traditional block-based RAID for redundancy—a technology that is incredibly mature and effective—and the pricing was clear. We also had someone on staff who had worked with and liked a very similar and compatible product, Apple's Xsan. So, we chose the StorNext-based system. The installation went very smoothly. And it has worked incredibly well for us—allowing everybody to access common storage from our six edit bays."

As the business and technology requirements changed over time, the MetroEast team found it easy to evolve the system. "When Active Storage could no longer provide support, we transitioned to Quantum StorNext, and it worked very well," Elkin-Bram explains. "We kept the same file system, used our existing disk arrays and fabric, and everything was read in exactly the same way. None of the people working on projects knew the difference—and we got terrific support."

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ABOUT METROEAST COMMUNITY MEDIA

MetroEast is dedicated to education and personal growth for all people. It believes passionately in the unrealized potential of technology to build community by engaging people and organizations, including the underrepresented, and it is committed to supporting active participation in the democratic process by providing people with access to communications technology and opportunities to engage in civic dialogue. Throughout its history, MetroEast has been committed to collaborating with local governments, educational institutions, nonprofit organizations, and individuals to bring these collective resources together to achieve community aspirations. MetroEast believes that electronic media can and should be used to encourage artistic creation, and the free expression of a broad range of ideas and opinions. It is dedicated to supporting and promoting the free exchange of diverse ideas to ensure a healthy and prosperous democracy.

The MetroEast team needed to make another change to the storage arrays as they ramped up to do more work in high-resolution formats, including 4K. "At a certain point, the old storage arrays just couldn't keep up anymore," Elkin-Bram remembers. "It was a problem especially when editors were trying to do synchronized, multi-clip editing with several windows running content at the same time." So, the team upgraded their storage by adding 290TB of StorNext QXS-1200 disk. The new system provided much higher performance, greater density, and lower operating costs in the form of reduced power and cooling requirements. "With the QXS-1200, not only did we get much faster performance, but we figure that the system will pay for itself in just a few years with the savings."

ADDING AN AUTOMATED ARCHIVE LAYER

The team also wanted to improve how the system handled protecting data and archiving files for later use. In the earlier system, users protected their work beyond the RAID-based redundancy by copying it manually to a second location. "If users wanted to preserve content for longer than the team's standard 120-day retention period, they had to write it to a portable disk, put it on a shelf, and keep track of where it was. It was a lousy system," Elkin-Bram explains. "What we needed was a system that could protect people from themselves."

So, the team added StorNext's automated migration and archiving software to their installation along with a StorNext LTO-based AEL Archive. The new system automatically creates copies of work in the archive, including keeping multiple versions of work in progress. It supports moving media off-site for disaster recovery protection and can track the integrity of stored media to provide secure long-term retention. "When we finish moving all of our old content into the StorNext archiving system, it will free up a huge amount of disk capacity for active work and help us reduce costs even more," explains Elkin-Bram.

And what about the future? "The technology for creating, storing, and broadcasting content is changing rapidly," says Elkin-Bram, "and nobody really knows where it will be in five years. Will the cloud play a part? Newer connectivity? I don't know. What I do know is that working with Quantum gives us flexibility and scale to help us deal with the next stage in our evolution."

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