



Video Furnace helps Lower Merion schools provide video capabilities to teachers and students

The Customer

The Lower Merion School District is located in Ardmore, Pa., a suburb of Philadelphia. The district encompasses 10 schools at the elementary, middle, and high school levels, with 5,100 computers (a combination of desktops and notebooks) in 10 networked buildings. LMSD's student population is approximately 6,900, and the district employs roughly 1,300 faculty and staff.

The Need

The school district had been seeking a network-based video distribution solution capable of supporting live streaming channels and a growing video library. Because the organization uses Windows and Mac OS/X, the system needed to be fully cross-platform, both for system users and those managing it. LMSD considered various vendors and a range of options, from traditional analog-based coax distribution to solutions that mixed analog with IP.

"I was never really happy with the other solutions," explained Michael Perbix, telecommunications specialist for the Lower Merion School District. "We looked at a number of different vendors that had a mesh of technologies, and none of them offered the cross-platform piece, which was really key for us. And the way they handled video on demand was not user-friendly. Some would have required us to have file shares open to watch video. Video Furnace was the first product we found that offered a true cross-platform solution that allowed complete control from Windows or OS/X and allowed everything to truly be network-delivered."

The Solution

LMSD selected Video Furnace to provide a solution that would address its needs. For the school district, one of the primary benefits is Video Furnace's InStream viewer. "All of the other solutions needed to have dedicated viewing software installed on all the workstations," Perbix said. "Video Furnace delivers its viewer with the video stream. Not having to worry about software being installed on every client really makes it a beautiful choice."

The district now offers 20 live streaming channels – including local channels, major networks and educational cable channels – that faculty can tune into for classroom instruction. The lineup includes four in-house channels that the middle schools and high schools use for live video homeroom announcements. One of the high schools even posts the video announcements as podcasts for students and parents to download. In addition, the district can use the in-house channels to carry video of guest speakers, graduation ceremonies and other school- and district-wide assemblies. For example, when the audience for a graduation is too large for a school auditorium, the district uses Video Furnace to carry a live simulcast into another room, so additional guests can watch live. In addition, the district now uses the Video Furnace system to encode programming and announcements that go out to the community via the local cable TV provider.

LMSD also is using Video Furnace for its video-on-demand (VOD) library. The district's video collection primarily includes videos that were produced in-house, teacher training materials and recordings of guest speakers. Anyone in the school district who is wired to the schools' network can watch videos from the VOD library.

Finally, the organization uses the Video Furnace technology for multicasting Internet2 videoconferences for viewing purposes. The system allows LMSD to take the video and audio out of the conferencing unit and plug it into the Video Furnace system so viewers can watch an Internet2 videoconference without being part of it. "That's a really nice feature," Perbix said. "We've gotten permission to simulcast a number of big videoconferences throughout the district so other people could watch them." LMSD also used Video Furnace's technology to simulcast its participation in an educational simulation game called Operation Montserrat where teams of students worked together to help devise a plan for saving residents from a volcano.

The Results

Perbix said the Video Furnace system was incredibly simple to set up. "It's been the easiest thing we've done, and that's saying a lot." The school district ordered servers from Dell, had them shipped to Video Furnace, which loaded the required software and configured the servers to the school district's specifications.

Said Perbix: "Video Furnace shipped the servers to us, and we literally put them in the rack and turned them on. Everything was working out of the box. It can't get much easier than that."

The school district plans to add more VOD content, and going forward, Perbix expects it to be simple to add features. "It's all software-based, so as the system becomes more advanced, it's very easy to upgrade," he said. "You're not locked into a hardware-based solution like other products. Everything can be easily upgraded, and that's one thing that makes the Video Furnace system so nice."

The school district's key stakeholders have been extremely pleased with the Video Furnace system as well. "Teachers have been very responsive to our ability to do live broadcasts, and the students are tremendously excited about the new TV program we have in place with live homeroom announcements," Perbix said. "Both love the ability for us to take live events in the district and simulcast them so they can watch them." For example, a holocaust survivor was a guest speaker at one school, but administrators felt teachers and students at other schools in the district would benefit from the presentation, so with the Video Furnace system, LMSD multicast the presentation throughout the district and recorded it for VOD viewing.

Perbix added that there have been no issues with the technology by the staff. "It's incredibly easy to use, even for teachers who aren't very technologically savvy. If it's made to be that easy, then people are going to use it and it's going to be successful, and that's what's happening here.

"The bottom line is, when you have a solution that is cutting-edge, easy to deploy, easy to use, easy to administer and extremely powerful, then you have a fantastic solution. That's the Video Furnace system."