

CASE STUDY - Radio Broadcasting

Tuning in to a Broadcast KVM Switching Solution Enables WFUV to Efficiently Manage Access to Computers and Other Broadcast Devices



OVERVIEW

When Fordham University's public radio station WFUV moved to a new facility, they created a studio design that would boost their flexibility, reliability and redundancy to ensure listeners would always be able to receive station content. By replacing their old system, the station has increased system uptime, improved productivity and enhanced trouble shooting capabilities while strengthening their ability to deliver continuous on-air content to their listening audience.

WFUV (90.7 FM) is a non-commercial, listener-supported public radio station, licensed to Fordham University for nearly 60 years. The station, staffed by 27 professionals and 70 students, serves nearly 300,000 listeners weekly in the New York area and thousands more worldwide on the Web. The University is licensed by the Federal Communications Commission (FCC) to operate WFUV at 50,000 watts.

CHALLENGE

Engineers Need Access To Equipment Located Throughout Station Facility

The new facility has computers spread across a variety of locations including the main studio, three smaller studios, a technology center, newsroom, voice over booth and at several workstations. With an Information Technology department consisting of just two engineers, resources were spread thin and equipment in several locales meant a lot of time traveling from system to system. Plus, without a redundancy system in place, if a workstation went down, broadcasting came to a halt, depriving listeners of programming content. With equipment spread across the facility, more time was spent figuring out how and where to work on issues rather than actual problem resolution.

"One of the challenges, because our department is so small and we have a large amount of computers to access, is being able to work on a variety of different servers in different locations," notes James O'Hara, assistant director of technical operations for WFUV. "What we wanted to be able to do is have a centralized place where everything connects into one system. We also wanted to have a redundancy plan so that if a workstation would go down, we would have the flexibility to bring another one right back up while we fixed the original problem."

SOLUTION

Switching System Offers Sound Solution for Consolidated Access

Following a recommendation from HA Design Group, a leading-edge design and engineering group contracted to create and implement the new plan, the station selected to deploy the Avocent AMX® KVM switching system. Through the solution, WFUV consolidated control of their computers and devices into a single user interface, which allows engineers centralized access to their devices from any location.

"I have used Avocent products in other applications and knew it was easy to implement, worked straight out of the box, and was priced more competitively than any competing product," said Willy Halla, president of HA Design Group. "The solution allows various clients throughout the station to see the different machines



PROFILE

Customer

WFUV (90.7 FM), Fordham University's Public Radio Station

Type of business

Public Radio Communications

Headquarters

Bronx, NY

Website

www.wfuv.org

Applications

Consolidated access of computers and broadcast devices

"Now we can access everything right from our desktop, which is very convenient... We also have an audio router which makes any audio source in the station available at any location. Together with the Avocent system, it forms the backbone of our station. Users are no longer bound to a particular location and can instead move seamlessly from office to studio to newsroom and have everything they need right in front of them."

James O'Hara

Assistant Director of Technical Operations
WFUV

CASE STUDY

and increases reliability by redundancy. If one workstation goes down in one on-air suite, station engineers can pick up another workstation easily and remain on-air, delivering content to their audience. Physical proximity is also no longer a concern and it takes the fan noise out of the control room.”

WFUV purchased one AMX5000 KVM switch, three AMX5010 switches that increase the number of users with simultaneous access, and 45 AMX5110 desktop user stations. Over 100 machines and six servers are connected to the solution delivering centralized access and control. “Now we can access everything right from our desktop, which is very convenient,” notes O’Hara. “We also have an audio router which makes any audio source in the station available at any location. Together with the Avocent system, it forms the backbone of our station. Users are no longer bound to a particular location and can instead move seamlessly from office to studio to newsroom and have everything they need right in front of them.”

IMPLEMENTATION

CAT 5 Infrastructure Improves Troubleshooting and Upgrades

Another benefit of the Avocent solution is the CAT 5/6 cabling infrastructure. O’Hara appreciates the benefits offered by the slim, flexible cabling and notes that connecting new devices as well as troubleshooting is much easier. “The system is extremely flexible and whenever we need to add something, all we have to do is plug in a new CAT 5 cable and we’re ready to go,” he said. “Because it is so flexible, we don’t need to do a complete redesign every time a new project comes around.”

Although the station does employ a professional staff, students man the station on nights and weekends and the simplicity of working with CAT 5 cable ensures that everyone can figure out and resolve issues as they arise. “The solution is very well designed and powerful, yet simple enough that a student can grasp the concept,” said O’Hara. “Now, if there is a problem on the weekend when I cannot come in, one of the students on duty would have the know how to fix the problem without needing me to drive in from home.”

Security features embedded in the solution also help protect users from tampering with the system, keeping it secure and limiting physical access to only those who require it. Each user has a user name, password and permission-rights associated to them, preventing users from accessing systems they should not be physically accessing.

The biggest benefit realized through the solution is productivity improvement. In addition to easing troubleshooting issues, engineers can now spend more time addressing problems rather than hunting for a place to resolve them. “Now, we spend our time working on whatever the actual problem is rather than running around looking for an available place to work,” said O’Hara. “If we ever lose a workstation, we can just switch to a new one without going off the air. As a result, system uptime has increased.” Moving forward, the station is intending to add some IP switches so engineers can log into the system from remote sites – either from home or from places where they are conducting a live broadcast.

Notes O’Hara, “The Avocent solution has absolutely helped us achieve and meet our goals of keeping programming content running all the time. Downtime has drastically decreased and the end listener benefits the most because they are guaranteed to have constant content coming at them. The solution enables us to work much more efficiently, resolve problems easily and timely, and responds to our need for expansion for new projects.”

RESULTS

- Consolidated access of computers and broadcast devices
- Decreased downtime due to system redundancy support
- Improved productivity

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