District 214 is the second largest high school district in Illinois. Its six high schools and four programs of specialized learning enrol roughly 12,000 students each year, and serve around 300,000 residents in the communities covering an area of 68 square miles. Each school is equipped with a language laboratory, library, career center, three computer laboratories, a writing laboratory, and a technology center. There are also approximately 200,000 resource items housed in the District's libraries across a variety of media, including videotapes, DVDs, and audio books.
The challenge

Ranked in the top 13% of Districts in the influential US News and World Report, which annually ranks more than 21,000 of the nation’s high schools, District 214 strives to increase student learning through engagement and innovative programs. These programs ensure students develop self-awareness, self-management, interpersonal, and decision-making skills, and aim to develop the next generation of ‘digital citizens’.

Each generation of students is increasingly tech-savvy with near ubiquitous smartphone ownership and constant internet access. High school environments have recognised this shift in both educational and social ways and adapted accordingly through the use of innovative multimedia technologies to enhance educational learning. Visual information systems are critical, influencing everything from classroom video-based learning through to digital signage displaying information such as daily lunchroom menus, events and after school activities around campuses.

With an existing mix of disparate visual systems and management tools spread across the different schools, the District 214 board approved a plan to overhaul the system and deliver a truly integrated IP video and digital signage system that could provide consistency yet also be tailored to each school’s individual requirements.

The system needed to deliver digital content to each individual school across the District, using an easy-to-manage set of tools. The requirements focused on the ability to display general school information, advertisements and important announcements for students, staff and visitors. The solution also needed the ability to stream both live and pre-recorded video content, including school sporting events, cable TV channels and morning announcements to every classroom.

The solution

Based on these requirements, District 214 selected an Exterity integrated IP video and digital signage system deployed in collaboration with AV integrator, AVI-SPL North America. The Exterity AvediaServer enables each school to efficiently manage the distribution of all TV, video and signage content across its campus.

Leveraging the school district’s existing IP network, the solution provides access to 12 tailored cable TV channels – with each school having a local channel of their choice – delivered to all connected screens around their campus.

A particular requirement for the IP video solution was the ability to stream morning announcements at a designated time to projector screens in every classroom. The AvediaServer Projector Control App enables the delivery of announcements, which are broadcast via the schools’ studios using an Exterity Encoder, to projectors serially-connected to AvediaPlayer Receivers. With a couple of clicks, all projectors immediately display the morning announcement and, once finished, revert back to their previous state. The app also displays helpful information on projector bulb and filter status. Exterity Encoders can also be used to stream other live events around campus, such as school sporting events and graduation ceremonies.

ArtioSign, Exterity’s digital signage solution, is used in different areas of each school to display informative content such as menus in the lunchroom and upcoming events or assessment information in hallways. There is also signage in staff areas with timetable information for teachers involved in collaboration projects. Several schools were quick to involve their students in the signage creation.

Exterity IP video and digital signage solution at District 214

Exterity uses Exterity IP video and Digital Signage Solutions to:

- Automate delivering video morning announcements to projectors in every classroom
- Manage delivery of Live Video, Digital Signage and TV in every school
- Stream Educational TV channels to any screen
- Share school events and activities with digital signs in common areas
- Override all projectors and displays with emergency messages
- Stream live school sporting events across campus
- Share Professional Learning activities in real time
CASE STUDY | District 214

“Today’s students expect to be able to access digital media technology at all times, and school districts can benefit from this by enhancing their curriculums with video-based learning, which really resonates with students. As a recognized leader for IP video and digital signage technology, Exterity is proud to be working with District 214 to further progress its educational offering”

Colin Farquhar, Exterity CEO

The result

The end result is a District-wide system that dynamically delivers live and recorded video content to 860 screens in 780 classrooms, as well as digital signage in numerous hallways, staff rooms and common areas. The projector and digital signage control apps, with their simple to use drag-and-drop interfaces on the AvediaServer, make it easy to manage individual and groups of screens from a central location. This includes scheduling a variety of content to be displayed at different times of the day or week on a per school basis.

As Keith Bockwoldt, Director of Technology Services for High School District 214 says: “Our new IP video and signage system is more than just a way of populating screens with information: it is a vital part of building a cohesive community of students and staff, a way of generating a school spirit that ultimately delivers a better learning experience within a more enjoyable and engaging environment. On a practical side, we now have a way of easily and efficiently managing what was previously a complicated process, with a much higher level of capability that is appreciated by everybody across the school district.”

Commenting on the District 214 deployment, Exterity CEO, Colin Farquhar, said: “Today’s students expect to be able to access digital media technology at all times, and school districts can benefit from this by enhancing their curriculums with video-based learning, which really resonates with students. As a recognized leader for IP video and digital signage technology, Exterity is proud to be working with District 214 to further progress its educational offering.”

About Exterity

Since 2001 Exterity has been designing, developing and manufacturing technically innovative products that deliver video over an IP network to some of the leading organizations across the globe.

Enabling distribution of HD quality TV, video and digital signage over enterprise IP networks to an unlimited number of end points, Exterity solutions support large volumes of content and receiving devices without compromising system performance or availability.

Highlights

- Deployed in over 40 countries
- Scalable IP video and digital signage solutions for organizations of any size and across any sector
- Unique industry leading features and market specific application

Headquartered in Scotland UK, we extend our global reach through our offices in Atlanta, London, Paris, Melbourne, Munich, Dubai, Hong Kong and Johannesburg. Localized knowledge and expertise is enhanced through the Exterity StreamForce program of credible, technically innovative partners, plus an extensive network of in-country resellers and distributors.