



Case Study

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ADVENTUS™

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Intel Strikes Chord At MusIQ Club

Adventus uses wireless technology to deliver music lessons

In 1997, Adventus* started developing music education software that would allow more and more families to teach their children to read and play music. After selling its award-winning software in traditional ways, CEO Jim Mullen wanted to expand the reach of his products to include more students in more locations. He felt the solution was combining instructor-led classes and new technology. MusIQ Club* was born, a program that combines traditional classroom instruction led by a music teacher with interactive software delivered over a wireless network.

The move from software development to management of a music club required upgrades in Adventus' network infrastructure. The company needed to make sure it could handle registration for parents, give teachers up to date access to class information and provide ongoing communication to families through the club blog. All this required increased security and processing power. With its new servers powered by Intel® Xeon® processor technology, Adventus is poised to manage its program growth, which has seen enrolment boosted to more than 3,000 students this year and a projected 10,000 students within another few years.

"We had to be certain the service was available 24/7," says Mullen, noting that since they were taking payments online they also required increased security and scalability to handle growth. "We have proven the technology effectively supports classroom education in a reliable environment with high student retention. The addition of early education-level programs to the revenue, make it a good business opportunity to deliver music education at one third to one half the price of traditional classes."

Making Music In Halifax

When first approached two years ago, Rafael Alcolado, Halifax MusIQ Club Program* Director, didn't believe it would work. "I didn't think connecting six laptops to a wireless router would be effective for teaching children," he says.

After one session, he was a believer, and has ramped up from a single class to a solid business. Today, the Halifax MusIQ Club has expanded to include up to 12 teachers instructing more than 400 students who are learning music on 54 laptops powered by Intel® Centrino® processor technology.

"It worked smoother than I thought was possible. We couldn't run the program without reliable equipment that performs well," he says, noting parents often tell him how much their children look forward to the club. He recalls one student's family vacation was cut short so that MusIQ Club wouldn't be missed.

"Children love to use computers and enjoy the program," says Alcolado. "They are learning new concepts and skills at an ideal pace. I am happy with the progress students can make in just one term."

Mullen notes program retention is reaching 85%, which is significantly higher than traditional music lessons. "It is easier for parents to give music education to kids; it is not as expensive (as traditional lessons) and kids love it," he said, noting children have so much fun interacting with animated composers, they don't realize they're learning. With the social element of connecting with other children at MusIQ Club, it becomes a very positive experience that can transform behaviour and attitudes.

"It has been a good business opportunity," adds Alcolado, who is expanding the Halifax program to include day care centres. He believes enrolment will increase to more than 500 students in the next year. "Never in my wildest imagination did I think I would be this successful," he says. "I am glad I took the risk."

Wireless Ensemble Plays In Concert

The program includes three parts: classroom instruction, self-paced learning on the computer, and group performance. Using laptop computers connected to a wireless LAN, students can play music together with sound being delivered through teacher's computer for a seamless concert experience.

Adventus leans towards computers with Intel® Core® 2 or Intel Centrino processor technology to provide the best performance for the price. "Teachers don't have a lot of patience for technical issues and with Intel we know the systems will perform well, every time."

Mullen says that reliable wireless technology and powerful computer processing power is essential to this concert feature. "Children love being able to perform and to do it, we need to process the information in real time. It works really well but needs solid performance and reliability at the computer level!"

When recommending laptops for MusiQ Club, Adventus leans towards computers with Intel® Core® 2 or Intel Centrino processor technology to provide the best performance for the price. "We pay attention to the reliability of the laptop because we can't have teachers worried about a computer when they have a classroom full of children," says Mullen.

"Teachers don't have a lot of patience for technical issues and with Intel we know the systems will perform well, every time. We've had few issues, which we attribute to our choice of hardware and reliable wireless networks."

In addition to in class education, teachers keep parents up to date with the progress of the lessons on the club's blog. They can post pictures, videos, class updates, as well as any homework assignments. Adventus' server running on Intel technology provides ample space and processing power to manage growth of the program an online content.

Registration & Management Simplified Online

To further simplify club administration, all registration is handled through Adventus' servers. With paperwork and payments handled online, teachers can simply log in before each class and easily print an up to date class list.

"And, by handling payments electronically, we are eliminating the need for clubs to hire administrators which would eat into margins," says Mullen, adding this administration support provides the club with current operational data about enrolment so they can ramp up marketing to boost numbers.

Collocated Servers Provide Room to Grow

Mullen estimates they are at the cusp of significant growth in the MusiQ Club. He wanted to ensure his back-end infrastructure could scale up to manage the demands placed on the system as enrolment boosts from 3,000 to more than 10,000 in the next few years.

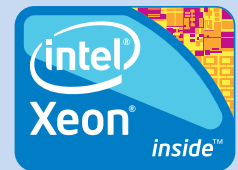
"We can't drop [the] ball on performance so we have to keep that moving forward ahead of demand," says Mullen, noting with off-site management and back up, they have the capacity to handle increased enrolment. They can also upload videos and manage software downloads as more and more students use the software at home.

Mullen says they are planning to offer a reduced subscription price for club members who want to download the software for home use. "This model would allow parents to pay a small monthly fee to access the software online. To do this, we needed a scalable solution that allows us to continue to invest in web technology with easy to install and downloadable software."

For internal software development, the company has opted to use a MacBook* with Intel Core 2 processor technology and a MacMini* with Intel Core processor technology. "We need to be able to test our software on a range of typical home systems, says Mullen. "With the growth in the program, and the addition of new modules, we will be adding another development machine that will likely be powered by Intel Quad Core processor technology."

About Adventus & MusiQ Club

Founded in Halifax in 1996, Adventus Inc develops and delivers cost-effective interactive music programs for students of all ages. With MusiQ Club combines software and traditional music education in an enriched group piano and music learning program where students of all ages learn to read music, play piano with both hands, improvise and compose music.



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