

Pembina Trails School

Real People

The need to combine two school divisions' outdated phone systems escalated the need to unify communications across 34 disparate buildings.

Real Networks

Deploy ADTRAN NetVanta Enterprise Communications Server to deliver an end-to-end unified communications solution based on Dell® switches and server hardware, Microsoft® Windows® Server 2003, Microsoft Active Directory®, Microsoft Exchange and Polycom® phones.

Real Value

The solution saves Pembina Trails School Division up to \$200K each year, empowers staff to communicate more effectively and protects Pembina Trails' investment in its phone system for years to come.



Smart
Solutions
for a
Connected
World.

Real People. Real Networks. Real Value.

Canada's fastest educational network deploys the industry-leading unified communications system.

Real People

The Pembina Trails School Division emerged as the result of combining two distinct school divisions and brought the communications needs of 34 buildings with their associated staff and 14,000 students under Don Reece, director of information technology at Pembina Trails.

Real Networks

As phone systems age and become outdated, organizations must come to terms with their next steps. Pembina Trails School Division recently faced the same challenge that many businesses, public and private, are facing today: an outdated phone system on one hand, and on the other hand, a need to put in place a more flexible, more cost-effective end-to-end unified communications solution that will stand the test of time. They needed a solution that included Voice over Internet Protocol (VoIP), unified communications and communications-enabled business processes that would lower costs, be easy for their IT staff to manage and for their employees to use, as well as keep pace with changes down the road.

Reece faced a number of hard choices when it came to choosing the right solution. "When the dust settled, I had 47 kms (27.3 miles) of dark fiber installed by Fiber.CA, running one gigabit per second through Dell switches. We had a number of flaky phone systems — sometimes voice mail worked; sometimes it didn't. My clients suffered through a 50/50 chance of getting an outside phone line each time they placed a call. And," laughs Don, "We were locked in to particular vendors depending on the phone system; for example, the only way we could get more phones for one system was to buy them off eBay!" His user base was anticipated to scale from 600 to 1,800 over the next three years. It was time to figure out his next step.



"ADTRAN embraced the vision we had for our phone system and improved it. Sometimes we didn't see the big picture as well as they did."

Don Reece
Director of
Information Technology
Pembina Trails School

The current phone systems were at the end of their lives. Service providers were hitting the school division with upwards of \$150 per trouble call and for moves, adds and change (MAC) requests. Also, lines were so expensive that much of the staff went without a desk phone. However, the school division's dark fiber network linking all 34 buildings was like a brand new highway, and Windows Server 2003 and Active Directory® provided a simple, scalable and reliable framework from which to provide applications to the staff. They had a wide area network (WAN), were eager to cut costs with SIP phones and media gateways and had a primary rate interface (PRI). Taking a close look at their options, Pembina Trails identified their needs: a unified communications solution that would help to reduce costs, enable staff to get their messages in one place, and simple Windows-based tools to allow IT staff to manage the system themselves.

Real Solutions

"Pembina Trails' vision was to buy what we would need in the future, not simply buy what we needed today," explained Don. "Our goal was unified communications; however, we wanted to be ready for future requirements, like IP trunking."

Reece had high expectations for the vendor: not only should they have the tools to achieve Pembina Trails' goals, Don wanted to work with a vendor with experience integrating VoIP and unified communications, expertise in Windows Server 2003 and Active Directory and understood how large organizations manage extensive data.

"The vendors we were talking to were saying, 'you need Cisco,'" said Reece. Pretty much every vendor was telling us we'd have to get rid of all our existing stuff and buy their new stuff — that is, until we spoke with the knowledgeable team at ADTRAN."

ADTRAN was able to work with Pembina Trails from day one, according to Reece. "I told ADTRAN we had Dell switches," explained Don. "And they said they could work with Dell. I told them we'd like to use Polycom handsets and they said they could work with Polycom. The conversation basically went on like that. You have Windows Server 2003, good. You have Active Directory, good. Basically, as long as we were SIP-compliant, ADTRAN seemed to be able to give us whatever we wanted. Their confidence and their flexibility were very attractive to us."

A Feature-rich VoIP Solution with Unified Messaging, Unified Communications and More

Built on the existing infrastructure, ADTRAN NetVanta Enterprise Communications Server integrates Pembina Trails' Dell switches, Windows 2003, Active Directory, Microsoft Exchange and Polycom phones. The installation provided improved internal and external security, while four extra Dell switches provide redundancy.

The NetVanta Enterprise Communications Server is installed in the Pembina Trails administrative office. IT staff support and maintain the network themselves by remotely repairing, problem-solving, and addressing issues from their desks.

Staff members work in the ways they are used to, just better. All messages, including voice, fax and email, are now in their inboxes, and they can get their calls and messages wherever they are. Staff can check for new faxes and listen to their emails from any phone. "The best thing is — it just works. We're seeing a lot of value from the NetVanta UC implementation," said Reece.

Feature-rich distance education tools, like video, audio and real-time collaboration are all possible when bandwidth is limitless and technology is seamlessly integrated into classrooms and programs. Pembina Trails is an award-winning leader in using innovative technology to support teachers and students. Pembina Trails is planning a public address system that will be handled with SIP-compliant hardware and software. They're looking at moving to SIP- or Ethernet-compliant projector systems so that Pembina Trails can handle broadcast messages across the school division. They will use NetVanta Enterprise Communications Server to deliver this.

A Bright, and Flexible, Future with NetVanta Unified Communications

Pembina Trails is extremely satisfied with the NetVanta Enterprise Communications Server implementation. They believe that NetVanta Enterprise Communications Server has them on the right path to deliver more innovative and cost-effective solutions for years to come.

"Openness and interoperability were key deciding factors," said Reece. "The world is changing. Monolithic companies can't shoebox us in anymore. They need to be agile like ADTRAN — tell us what flavor you want and we'll set it up to your taste. ADTRAN has figured it out."

Cost-effective Without Compromises

The NetVanta Enterprise Communications Server implementation will save Pembina Trails up to \$200,000 a year, enables IT staff to manage the system themselves and makes it easier for teachers, students and parents to keep in touch:

- Simplified business processes with unified communications across 34 distinct buildings for over 600 users with Windows Server 2003 and Active Directory integration.
- Cut long distance costs by using VoIP, investing in SIP-compliant Polycom phones and using existing Dell switches at a fraction of what it would have cost to buy new Cisco switches.
- Replaced external support and maintenance requirements resulting in dramatic savings in administration and maintenance costs.
- Improved customer service. Clients were used to waiting weeks for service. Now the IT department provides service quickly.

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