

# West Edmonton Mall

## West Edmonton Mall Provides Anytime, Anywhere Communications With Siemens HiPath Wireless Portfolio

West Edmonton Mall in Edmonton, Alberta, Canada is the world's largest entertainment and shopping center and Alberta's most popular tourist attraction. The mall features more than 800 stores and services, 110 eating establishments, and eight major attractions including a waterpark and a hotel. The enormous structure spans the equivalent of 48 city blocks and receives some 22 million visitors each year.

The mall's management is committed to providing quality shopping, hospitality and entertainment experiences for visitors. A big part of that effort involves having the latest communications technology available to provide convenient voice and data connectivity for guests, shoppers, tenants and employees.

### **Challenge** **Develop a Wireless Communications Network that Enables Hotel and Conference Center Guests, Visitors, Tenants and Employees to Securely Access Information from Anywhere Within the World's Largest Mall**

To continue attracting a large number of visitors from around the world and support its many guests and tenants, West Edmonton Mall must invest in the technologies that many people are coming to rely on. That includes providing wireless communications capabilities throughout the mall, so visitors, hotel guests, employees and tenants can communicate, access the Internet and download files regardless of their location.

"Everyone is recognizing that we're becoming a wireless society; people want information no matter where they are and they want to get that information quickly and at an affordable cost," says Joseph Schuldhaus, vice president of information technology at West Edmonton Mall.

"There is a huge opportunity to create an environment in the mall that attracts more repeat visitors and generates a sense of community. We wanted to create a communications environment that matched the innovation and imagination of the world's largest mall and deliver an unmatched customer experience from every aspect including better information on sales, wireless entertainment, and the various other features our visitors can access wirelessly on a cell phone, laptop or PDA."

At the same time, Schuldhaus says, there is a growing realization that the airspace within facilities such as shopping malls can actually generate revenue for the companies who own the space. "We need to start thinking in terms of cubic feet of airspace and how we can use it," he says. "We're moving to the point where a large campus environment like a shopping mall can leverage this space and work with telecommunications companies to ensure that the best solution is available for data, voice and video."

Furthermore, tenants at the mall increasingly are looking for wireless communications capabilities. Some have already installed WiFi systems. A mall-wide wireless service would help attract new tenants to the mall and enable tenants to use a single system for their wireless needs, Schuldhaus says.



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## Solution

### HiPath Wireless Portfolio Delivers a Secure, Reliable, Easy to Deploy and Manage Wireless Solution That Enables Fast and Secure Roaming Across Access Points Throughout an Environment

West Edmonton Mall looked at wireless technology from all the major players in the marketplace, Schuldhaus says, and selected the Siemens HiPath® Wireless portfolio, a centrally deployable 802.11 wireless local area network (WLAN) system. The product, is deployable over any data or VoIP network and enables fast and secure roaming across access points throughout an enterprise environment.

Among the reasons mall managers selected Siemens HiPath Wireless is its Layer 3 overlay architecture, which features centralized mobile session management and control, as well as superior performance in scale, capacity and throughput. Rapid subnet roaming supports real-time applications such as VoIP without the need for re-authentication and re-keying as a user moves around.

With HiPath Wireless' virtualization capabilities, organizations can dynamically create user access policies for different campus locations and different classes of users or applications. The HiPath Wireless Controller automatically provisions the right levels of access and quality of service for roaming users.

Using the Siemens HiPath Wireless system, West Edmonton Mall launched WEMiSphere, a WiFi service that provides high-speed wireless Internet access. The system was deployed initially throughout the Fantasyland Hotel, as well as in the mall food court and waterpark. The mall is adding new access points each month, and WEMiSphere is expected to be available throughout the mall by some time in 2006. The mall has launched an awareness campaign to let tenants know about the wireless capabilities so they can easily connect to the network, Schuldhaus says.

## Result

### West Edmonton Mall's WEMiSphere Wireless Network Provides Improved Customer Service and Generates New Revenue and Cost-Cutting Opportunities

The implementation of WEMiSphere via the HiPath Wireless system is delivering multiple benefits for the West Edmonton Mall. The hotel now has complete wireless service, so guests can have access to the Internet from their rooms, the conference center, lobby, ballroom, dining areas and lounge. This is expected to help attract not only individuals who want wireless access, but organizations that run business conferences where wireless connectivity is a critical component and an integral part of the event.

The wireless technology will also help attract visitors who are on vacation or spending leisure time at the mall but still need access to their office, Schuldhaus says. He cites an example of a businessman who recently visited the waterpark with his family and was able to take part in a three-way conference call using Voice over IP on his WiFi phone while seated water side. The call was so clear that the people on the conference had no idea he was at a waterpark.

"Wireless communications allows users to be in touch no matter where they are," Schuldhaus says. "This system makes it easy for guests to roam around and use the network anytime they want to update files, read emails or communicate." The wireless network is an example of the Siemens LifeWorks™ concept, which describes the new intersection between public and private communication services. LifeWorks weaves together all the tools people use to communicate, both at work and in their private lives.

People who work at the mall and use the Internet for research, online banking, and checking email messages can now do these things while on their breaks, Schuldhaus says. Mall tenants who don't currently have Internet access in their stores can also access the Web via the system.

The mall is using its wireless network to help with security operations. Security personnel on foot or in patrol cars use wireless devices to monitor images from any of the 200 new digital security cameras placed throughout the mall. Some 10 terabytes worth of images are accessible from devices such as tablet PCs.

In the future, the wireless network will be able to provide location-based marketing capabilities. For example, a shopper in a particular section of the mall using a PDA or other device will be notified about a special sale being offered by a retailer in that area of the mall. Location-based marketing will help drive additional revenue for the mall.

West Edmonton Mall, which has an IP-enabled PBX for voice communications, is also considering using the wireless network for IP telephony. Schuldhaus says the mall expects to save money by replacing many cell phones with WiFi handsets

"The HiPath Wireless system's Layer 3 overlay architecture gives us the opportunity to deploy access points over a wide area network and still have control," says Schuldhaus. "We have plans to deploy access points at home offices in remote locations over a VPN, and HiPath Wireless allows us to do that."

The management of the West Edmonton Mall also owns the giant Mall of America in Bloomington, Minn., and is looking into a similar wireless technology implementation at that facility, Schuldhaus says. "There is no end to the opportunities you have when you put in wireless technology," he says.

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