



Case Study

If You Build It Wireless, They Will Come. (Bet on It.)

At a Glance

Industry:
Hospitality

Market:
Convention Services

Application:
Wireless Internet Access

Products:
MobileLAN™ access WA22
Professional Services



M A N D A L A Y B A Y

The Mandalay Resort Group had an idea. A grand idea. Build a convention center with the same luxury and spaciousness of the company's renowned Four Diamond Mandalay Bay Resort and Casino. Make it the largest convention facility directly on the world-famous Las Vegas Strip. Make it elegant and beautiful, functional and flexible. And make it wireless.

Anyone who has visited or exhibited at a trade show knows that getting Internet access in a wired facility can be a monumental hassle. The headaches of pulling cables, stepping over connections and wires, then paying for sometimes-spotty service are anything but convenient or efficient. So Mandalay Resort Group (MRG) chose to start with the best and equip the center with a wireless network.

Plans for the Mandalay Bay Convention Center were grand indeed: 1.5 million square feet, comprised of nearly one million square feet of exhibit space; four levels of multi-purpose meeting and function space; plus flexible breakout space to accommodate more than 75 simultaneous meetings. Service was to be of the highest level, so the wireless network had to be first-rate too -- no room for signal drops or holes in the wireless coverage. Now MRG just had to figure out how to get it built.

Although several preexisting exhibit halls have added wireless capabilities to their networks, the Mandalay Bay Convention Center posed a daunting challenge to the company's IT department: how to plan for a wireless network, with coverage to span in excess of 1.5 million square feet, with no hall in existence -- and only a set of blueprints to go on? After researching the options, MRG found its answer: Intermec Technologies' Professional Services Team and wireless networking hardware.

"MRG's long and positive history with Intermec certainly made the company an easy choice -- our time and attendance systems have been supplied by Intermec since 1993," said Alex Terry, Mandalay Bay Director of Information Technology. "However, we chose to work with Intermec for reasons beyond our good relationship.

"We considered wireless networking products from several other reputable hardware manufacturers, but Intermec was the only one that proposed installing it themselves. All other manufacturers outsourced the installation," said Terry.

"MRG saw tremendous benefit in working with one company for everything -- the site plans, the hardware and the installation -- there is no finger-pointing or passing the buck if things go wrong," said Terry. "Mandalay Bay was not interested



in purchasing and installing a solution only to run into problems later that we couldn't solve."

Ross Conley, Intermec senior account manager, was onsite for much of the network planning and installation. "One of the biggest hurdles in this project was designing a wireless network for a building that hadn't been built. All of our site plans were based on drawings. We worked side by side with the Mandalay Bay IT department when the center was all just a thick set of plans."

Intermec assisted in the design and supplied the wireless infrastructure to the center, a system that includes more than 80 Intermec WA22 wireless access points. The WA22 features dual radio slots, which allow users to employ the widely adopted 802.11b wireless technology, and the option to add a second radio. The access point also features power over Ethernet, requiring only one Ethernet cable to the access point for supplying both power and data.

"Mandalay Bay wanted the best wireless network we could get within our budget," Terry said. "In order to preserve our ROI, we absolutely required dual-radio access points; we don't want to buy all new hardware when we're ready to implement the new standard. Intermec's dual radio access points allow us to connect with current hardware using 802.11b technology and they will also work with

any 802.11a-based hardware that we purchase in the future."

Mandalay Bay Convention Center's IT department also relied on the Intermec Professional Services team to install and tweak the system for optimum coverage. "The logistics involved in outfitting a property of this size required careful antenna selection and placement," said Conley. "We used specialized antennas to ensure that the network provides coverage exactly as Mandalay Bay IT management specified."

For exhibitors, MRG's investment in a wireless network means quick and easy access to the Internet from anywhere within the center. For MRG, the network represents a valuable revenue stream from user access fees. The network also saves the center in labor costs; wireless connectivity means less manpower is needed to implement user moves and changes that are an everyday occurrence in convention centers.

"The very nature of the convention center business requires that our network be flexible and mobile," said Terry. "On any given week we can have more than ten programs going on at a time, so the ability to supply Internet access without pulling cables for each customer is a huge time and labor saver."

"The Intermec Professional Services team delivered a true turnkey solution, from consulting on the initial project plans

and conducting the site survey, to the network configuration, installation and final testing," Terry said. "They were with us every step of the way, and made sure we were pleased with the final results."

"We're proud to be a part of this magnificent center and to bring the benefits of wireless communications to Mandalay Bay event participants and MRG," said Conley. "Making life easier for mobile workers has always been our priority."

The Mandalay Bay Convention Center opened in January to rave reviews from attendees and exhibitors alike, and with a fully functional wireless network that now achieves speeds in excess of a T1 connection out to the Internet and covers 100 percent of the tradeshow floor as well as the meeting spaces.

"The Intermec wireless installation makes it possible for the Mandalay Bay IT Department to deliver an outstanding and much-needed service to our convention center customers," Terry said. "We're already planning to expand coverage to some other locations within our property."

"In addition, we expect to see a return on our wireless network investment within twelve months. Data services are expected to generate a significant amount of revenue in 2003. The Intermec wireless network is a big part of that equation."

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