



Dunes Manor Goes Wi-Fi in Their 11-Story, 170 Room Resort with Dual Mode D-Link Access Points

Wireless Coverage for the Entire Hotel Is a Breeze with 13 Access Points and One Firewall Appliance

The Challenge

Like most modern hotels, Dunes Manor wanted to offer its guests seamless Internet connectivity throughout the premises. They had previously installed two wireless access points on the ground floor. This was only enough to cover the lobby and banquet hall, however.

With 11 floors and 170 rooms, a complete wireless implementation seemed daunting, at first. Initially they figured each floor would need CAT5 cable from a main router in order to distribute wireless access points throughout the hotel and minimize interference. Running cable throughout the hotel, however, was not in their budget. The labor alone would cost them upwards of \$35,000.

They needed a way to link up wireless access points on every other floor and share the same main router down on the ground floor. Al Frazier, Sales Manager at D-Link partner Internetworking Technologies, helped survey the premises and determined that complete coverage would require a backbone approach. Internetworking Technologies, Inc., a mid-Atlantic reseller of D-Link equipment, is a computer technology firm that has been serving the East Coast for more than 10 years.

By linking three centrally located access points in Wireless Distribution System (WDS) mode with five peripheral access points on each side of these central units, it could be done. The five access points would be on every other floor, and the three WDS units would manage the backbone down the middle.

"When we told Dunes Manor that we could provide wireless coverage for the whole hotel without running CAT5 everywhere, they were elated and signed us on for the job," said Frazier.

The Solution

D-Link was the obvious choice for Internetworking and Dunes Manor, because of a particular access point that D-Link offers. The D-Link DWL-8200AP Access Point operates in dual mode as either a WDS node or an AP - a perfect fit for a building like the Dunes Manor Hotel. Internetworking Technologies President Dave Dolan says "A lot of equipment is one or the other, with other manufacturers, you'd have

to buy two, but D-Link offers the exact functionality we need in one box. With Dunes Manor, we set it up so the WDS 8200's operate on the 802.11a channel. That's the backbone - three down the middle. Then we put five on each side on every other floor, operating on the 802.11b/g channel in AP mode. There's no overlap whatsoever. We don't have to worry about interference."



Since installing D-Link wireless products, travellers at the Dunes Manor in Ocean City, Maryland enjoy high speed Internet access in every room.

Internetworking also installed a D-Link DFL 700 Desktop VPN Firewall. The DFL-700 is an easy-to-deploy VPN and firewall appliance featuring integrated Network Address Translation (NAT), SPI Firewall, advanced content filtering features, IDS protection, bandwidth management, and Virtual Private Network (VPN) support. "We really like the bandwidth shaping capability," said Dolan. "It allows us to tell the unit how much bandwidth is available and how to divide it equally among users. This way, a guy downloading a huge video file won't drag the whole network down to its knees."

D-Link came through with not only the right equipment but helped with engineering expertise to make this installation a breeze. "Jeff Wichert, the engineer from D-Link, helped us a great deal," said Dolan. "We appreciated the hands-on assistance. It's not like we were sent to a call center in India to be helped by a guy with a troubleshooting flow chart."

Customer Profile: Dunes of Manor

Dunes Manor is a four-star oceanfront Victorian hotel in Ocean City, Maryland. With 170 rooms and 11 stories, it services thousands of travelers every season in one of the Mid-Atlantic's largest resort areas. The local population grows from 20,000 in winter to more than 120,000 in the summer months.

All Dunes Manor hotel rooms are oceanfront, with spectacular views and relaxing sounds of tumbling surf in the background. The resort is centrally located near the boardwalk and Ocean City's numerous dining, entertainment and amusement diversions.

"In the highly competitive resort business you need to give guests all the comforts and amenities possible. That includes comfortable beds and convenient Internet access."

- Ed Lawson
Dunes Manor
Director of Engineering



DWL-8200AP

DFL-700

PRODUCT FEATURES:

DWL-8200AP Access Point

- Simultaneous 802.11a/g Connectivity
- Plenum-rated Metal Chassis
- 802.3af PoE Support
- Supports WPA2, WPA, and WPA-PSK/AES over WDS
- Also Works as Wireless Distribution System (WDS) with Access Point, and WDS/Bridge (No AP Broadcasting)

DFL-700 Desktop VPN Firewall

- Advanced Firewall Security
- Strong AES Encryption for Secure VPN
- Manage Up to 200 VPN Tunnels

Dunes Manor was thrilled with the results. "In the highly competitive resort business you need to give guests all the comforts and amenities possible," said Ed Lawson, Director of Engineering at Dunes Manor. "That includes comfortable beds and convenient Internet access."

"The coverage is quite impressive," continued Lawson. "Each and every room - and we have 170 of them - gets great connections."

Dave Dolan was especially impressed with the D-Link equipment. "I'm partial to D-link's commercial grade equipment," he said. "The routers, firewalls and switches are excellent. We've all been very happy with the quality, reliability and performance."

Lawson recounted a story about one guest who now plans his working vacations around the Dunes Manor resort. "This gentleman was working on his laptop in the restaurant, and he ended up booking a vacation at Dunes Manor two weeks later," said Lawson. "He wanted to be able to work while his family enjoyed the beach and resort. That's one of the things the Wi-Fi network has spurred. It's a return on investment of sorts."

With D-Link's robust networking solutions installed, the Dunes Manor now offers solid coverage in every one of their 170 rooms, spread across 11 floors. The addition of high-speed Internet access throughout the hotel has helped the Dunes Manor stay one step ahead of the competition, and keep their customers coming back.

Dunes Manor is so happy with the existing network that they plan to install a second line and supporting network for their internal needs while keeping the Wi-Fi network separate for guests. They'll be using D-Link equipment.



Internetworking Technologies provides system integration and support for businesses with 5 to 300 users on their network.