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SUMMARY

Many current network users are looking for mobility and flexibility in using their PCs. This presents a challenge for network managers who have spent a large amount of time and money maintaining a wired infrastructure. Making changes to the existing wiring can be difficult and expensive.

Wireless Fidelity (Wi-Fi) is the trade name for a popular wireless technology used in home networks, mobile phones, video games and more. It covers the various IEEE802.11 technologies, including 802.11n/b/g/a. Wi-Fi technologies are supported by nearly every modern personal computer operating system and most advanced game consoles, printers and other peripherals.

FEATURES

- Data rates up to 54 Mbps
- Integrated and/or external antennas
- Unlicensed spectrum of 2.4 GHz and 5.8 GHz
- Power over Ethernet (PoE) capabilities
- Indoor and outdoor use
- 802.11 a/b/g/n standard access points

BENEFITS

- Mobile access to information
- No need to run cabling to new locations
- Quick deployment time
- Portability
- Scalability
- Quick return on investment
- Easy add-ons and upgrades

REAL WORLD EXAMPLES

Situation: A warehouse supporting a distribution company needed to provide network connectivity to the entire facility to enable a more automated order entry system for replenishing inventory.

Problem: They had a large area to cover with no easy way to run wires, plus the new replenishment system allowed for the use of mobile scanners to automatically place orders for low or out of stock inventory items.

Solution: Wi-Fi was deployed throughout the warehouse to allow for mobile connectivity of laptops, scanners, and other network elements. This saved the company time and money by allowing an immediate network installation without having to run new cabling. It also gave the flexibility to deploy the new replenishment system making them more efficient in reordering inventory and saving them big inventory costs.

Situation: A community hospital was installing new access points in its medical facility to allow for advanced network applications.

Problem: The hospital was not happy with the antenna

choices that came with their access point because they were not aesthetically pleasing for the medical campus environment.

Solution: They purchased a mix of ceiling tile antennas and above-ceiling tile antennas. They enjoyed high quality wireless connectivity, while keeping the antennas invisible to patients and visitors of the hospital.

ADDITIONAL CONSIDERATIONS

- Has a site survey been done?
- What are the bandwidth requirements?
- What type of traffic will be running on the network?
- Is there an existing network diagram?
- Are aesthetics important?
- What is the expected number of users?

PRODUCTS

- Access points
- Enclosures
- Network routers and switches
- Racks and/or enclosures
- Power solutions
- Wi-Fi handsets
- VoIP System
- Antennas
- Tools
- Test equipment
- Premise cables or wire

Knowledge Solutions

Providing the intelligence for optimum, faster decisions

- TESSCO.com
- The Wireless Guide
- The Wireless Journal
- The Wireless Updates
- The Wireless Bulletins