

## CC&N INSIGHT – Wireless Network Design & Installation

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### Key Considerations -High Performance WLAN Design

In the past wireless networks were often viewed as a luxury- a convenient tool for visitors and employees to access online information and documents in the conference room. Today this useful tool has become an essential part of the business world. With wireless access quickly becoming a basic business expectation, a company's wireless network design is now more important than ever before. An appropriate design for a wireless network will result in a network that actually works and delivers the responsiveness, access, speed, reliability and capacity that are needed to accommodate the modern business. To ensure that your company's wireless network design is of the highest caliber we suggest it addresses the following.

#### **Applications:**

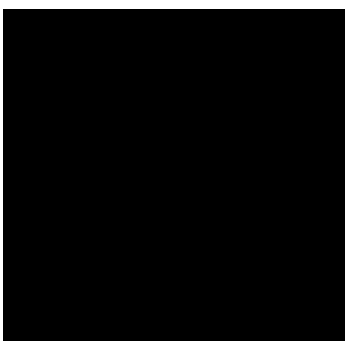
A key factor in the design of a wireless network is the consideration of the applications that will access the network. Companies using latency-sensitive applications, such as video conferencing and wireless voice call, require a design that supports images and video even when bandwidth increases. Networks that provide support for these latency-sensitive applications provide higher speed, capacity, and reliability for users than a traditional wireless design.

#### **Systems:**

Different markets require different types of network design. Hospitals and clinics require Voice over WiFi (VoWLAN) for staff, secure access to patient medical records, Real Time Location Services (RTLS) for medical devices, and high capacity Guest access in a RF challenged environment. Warehousing and distribution require a reliable wireless network in the middle of massive material storage and consistent connectivity for highly mobile, rapidly moving ERP (Enterprise Resource Planning) devices. Manufacturing requires constant connectivity for tools and sensors, and RTLS for ERP. Colleges and universities require high speed, high capacity networks for classrooms and lecture halls. All require broad coverage and connectivity, but the individual systems each require a different wireless implementation.

#### **Devices:**

Another factor driving network design is the rapid increase in number and types of wireless devices. Bring Your Own Device (BYOD) movement has been a huge impact on the quantity of devices accessing the wireless network. As well as companies are issuing multiple devices to their employees. With more devices serving more applications, company networks must



provide a robust system that can handle the various devices and enforce company usage policies across a variety of devices.

**Growth:**

Wireless technology continues to change rapidly, making it challenging for companies to keep up with standards, skills and certifications. In order to balance design and cost effectiveness a wireless network design must plan for future expansion needs of the network. A wireless network must be engineered to accommodate a company's future growth and the increase in devices that go with it.

**Expert Design. Experienced Installation.**