

Five Tips for Wireless Network Planning

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We live in a society with ever-evolving technology, which makes the process of evaluating and selecting the tools and programs best for your organization a challenging task. Look at the integration of wireless in the workplace as an example.

Traditionally, wireless networks were set-up as back-up networks to support occasional mobile users in common areas such as the lobby or conference rooms. The majority of a business's "traditional workforce" was bound to a desk with hardwired (LAN) connectivity.



Today however, it's become more customary that employees are using laptops as their primary PC, as well as relying on other portable devices such as iPads and smart

phones. Even workplace infrastructure such as sensors, security cameras, and speakers are becoming reliant on wireless connectivity.

This evolution requires many companies to re-think their needs for a wireless network.

How much bandwidth do you really need? How much will be needed in the future? What are the most reliable options? What is most cost effective? There are options, so how best to make the right choices?

To help with these questions, here are **five easy tips that every business owner and A/E/C (architect/engineer/contractor) professional should keep in mind when planning a wireless network**.



Five Tips for Wireless Network Planning

- **1** Nobody understands your business better than you. Map the needs of your workers in advance. This includes the number of users, areas where wireless is typically used and devices used (smart phones, tablets, laptop, point-of-sales, etc...)
- Research the common applications used across your organization. High bandwidth applications like streaming video, video conferencing, e-learning, music and/or video on demand can use up your link budget quickly. By understanding your traffic usage early on, you'll likely save a lot of headache later. Previously, networks didn't have enough bandwidth to support video streaming applications, causing images to freeze, chop, transmit slowly, or lose connectivity completely. However newer networks have progressed, and operation data rates can support these high bandwidth applications successfully (802.11n operates 54 Mbit/s to 600 Mbit/s).
- **Prioritize.** Once you know the number of users, devices, areas of use, and applications, use this information to prioritize your network traffic, set-up security levels, and customize your network to ensure the reliability of your data network.
- Plan for the future. By understanding technology trends and projections, you can plan accordingly to be sure that your business's infrastructure can support these evolving technology changes along with increased bandwidth and storage requirements. (For example, the latest 802.11ac standard requires modifications to the cable infrastructure as compared to existing or legacy wireless access point requirements.)
- 5 **Lastly, keep your client experience in mind.** If you focus strictly on the needs of the people within your organization without meeting your clients' needs and expectations, it will not matter how great of a network you have.