Interviewing Managers and Users

It is recommended to create some type of checklist or formal site survey questionnaire to use during the interview process. This will ensure specific details about the business and proposed wireless deployment are not missed. The use of such forms helps ensure uniform, repeatable interviews.

Has a site survey ever been performed in the past?

It is good to know if a site survey has previously been performed at a location. Although the previous site survey is only as good as the person who performed it, it may be beneficial and a timesaver to have some information available. Depending on when it was performed, a previous site survey report may not be accurate—physical changes to the location may have taken place—for example, additions of rooms or walls or changes to the interior design.

Are any blueprints, floor plans, or any other site-specific documentation available?

Blueprints, floor plans, or other documentation about the location are very helpful in performing a site survey. If this information is not available it may have to be created, which in turn would create an additional expense for the customer. The accuracy of these documents needs to be considered in order to provide ideal site survey results.

How many users anticipate using the wireless network?

The number of expected users of the wireless network is valuable information to have. Knowing the number of users will help determine the amount of infrastructure equipment, such as access points and bridges, which will be required for the deployment. Discussing with department managers the number of users on the network as well as the number of working shifts will help provide adequate planning.

Will public access be required?

If public access to the network is required, that will potentially affect the number of infrastructure devices such as access points required for the deployment. In addition to the equipment, security and backward compatibility also need to be taken in consideration in this situation.

Is there any preference for a specific manufacturer’s equipment?

It is a recommend practice for a site survey to be performed with the same manufacturer’s equipment that will be used in the deployment. So understanding the customer’s preference of manufacturer must be determined at the initial phases of the site survey. This will ensure good results based on the design of the wireless network.

What is the coverage area?

The intended coverage area of the facility also needs to be addressed. This helps provide a surveyor with information to accurately estimate how long a physical site survey may take and roughly estimate the amount of hardware required. Knowing the coverage area will also help determine any unexpected obstacles that may occur as part of the site survey process.

Is an existing wireless network in place?

If an existing wireless network is in place, it needs to be addressed as part of the site survey process. Questions need to be asked such as:

What technology is in use?

How many users?

Where the access points?

What is it used for?

Knowing the answers to these and other questions will help determine the role, if any, that the existing wireless network will play in the new deployment. Keep in mind some organizations may have a quite extensive existing wireless network and may be in the process of upgrading to newer technology. If this is the case, it will need to be determined if any of the existing network components can or will be used with the new deployment.

Are there any known areas of RF interference?

Information regarding known areas of RF interference is very useful in a site survey. It will save time if previous knowledge of RF interference is made available as part of the site survey process.

Are there any known areas that may lack RF coverage?

Just as previous knowledge of areas affected by RF interference is valuable, the lack of RF coverage in specific areas is also very good to know. This will help a surveyor determine any special situations that may be addressed during the site survey process. This may require testing of various types of antennas to help provide RF coverage in areas that are currently lacking.

What type of applications will be used?

It is important to know the types of applications that will be used. Applications—either software or hardware—will affect the load and number of access points or other infrastructure devices required. The surveyor should also become familiar with any special circumstances that may be required to support these applications.

Will voice or other applications that require quality of service (QoS) be used?

If applications (such as voice handsets) are planned for the location, this will have an impact on the site survey and design of the wireless network. Because these types of applications have greater requirements for signal quality and signal strength as well as roaming, this will need to be taken into consideration during the site survey. Additional density and more access points may be required. Video over wireless LAN is another application that may require quality of service. Like voice, video is subject to latency and may involve special design requirements. Video over wireless LAN is used in applications ranging from sports venues to security surveillance and monitoring.

Is roaming required? In most cases, the answer to this question is yes. This is especially true with networks that will be using voice handsets. Voice handsets are one of the most commonly used wireless LAN devices that require seamless roaming capabilities. Although notebook computers and PDAs may require roaming, voice and video applications are time bounded and subject to latency issues. Fast secure roaming may also be required. If roaming is required, the amount of overlap between RF cells would need to be closely looked at to ensure reliable sessions for the devices connected to the network.

Is Power over Ethernet (PoE) required? Understanding the Power over Ethernet requirements is another essential part of the wireless LAN site survey. Knowing the capabilities as well as the number of devices expected to use PoE will play a role in the design and types of equipment used in the wireless network. 38893c08.indd 264 5/19/09 6:11:52 AM Defining Physical and Data Security Requirements

What are the wireless security requirements?

As much information as possible on the security requirements is very helpful with a site survey and design of the network. Some security solutions may require additional hardware or software that would have to be taken into account for the network design. Will an escort be required? In many cases, people are not allowed to roam freely throughout a business. An escort might be needed to walk through a location with a site surveyor. In addition, the escort and surveyor will need access to areas that may be locked or secure, such as wiring closets and computer rooms.

Are there any legislative compliance requirements?

Depending on the type of business in which the wireless network will be installed, there may be legislative or other compliance requirements. For example, medical institutions may need to meet HIPAA requirements, and retail establishments may require PCI compliance. These need to be taken into consideration as part of a wireless LAN site survey and deployment.