

## Wireless Network Security

### Wireless goes Mainstream

With the proliferation of Broadband Internet Access and inexpensive Wireless Network Devices, it seems everyone including consumers and businesses alike are setting up wireless networks. While the flexibility and ease of deployment make wireless network solutions attractive, securing physical access to the network is difficult, since anyone within range of the Access Point (AP) can potentially eavesdrop on the network activity.

### Securing your Assets

In order to secure a wireless network from potentially harmful attacks, security and encryption must be used in order to control access to the network and to thwart attempts to decipher information being transmitted over the wireless network.

The first step in preventing unauthorized access to the wireless network is setting up a Security Key, also known as a Wireless Equivalent Privacy (WEP) or Wi-Fi Protected Access (WPA) key. This is typically done through the wireless router or Access Point within the infrastructure. The security key is then installed on the client machines authorized to access the wireless network. Unauthorized devices that find the network by randomly scanning channels looking for Access Points will be unable to access the network without this key.

### Some Vulnerabilities Remain

As with any security protocol, some risks remain. Many of the prevalent encryption standards including WEP and WPA, can be deciphered if the attacker possesses a significant level of sophistication.

WPA is generally considered more secure than WEP due to the way in which the keys are used within the packets. Key management is built into the WPA specification, which is a significant improvement over the WEP protocol.

### Bring in the Experts

With the growing prevalence of the Internet, and the increasing threats coming out every day, securing your network and your data is more important than ever. If you have deployed a wireless network or plan to do so in the near future, be sure to have a network security expert review your configuration and check for vulnerabilities. A proactive approach to security is always easier and less costly than dealing with a disaster. Protect your information assets, and allow your company to truly harness the power of the wireless web.

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