Teacher’s Notes

Chapter 1b:  
Design Exercise: A Small Home Network

# Role in the Course

Like Chapter 1a, this chapter helps students see how the concepts they are learning work in a familiar environment for many, a small home network.

# Flow of the Material

The chapter looks at the bits and pieces and how they fit together.

It also illustrates that routers, switches, access points, and other devices may not be stand-alone boxes but may be combined in multifunction devices.

# Hard Parts

DHCP requires a bit of attention.

# CEPTs

Routers, switches, access points, and other devices may not be stand-alone boxes but may be combined in multifunction devices.

# Teaching Suggestions

I rarely teach this module because things have gotten simpler since almost every connection is wireless. Instead, I sometimes just do something as part of Chapter 1. I ask the class if they have cable modem or ADSL and if they have a wireless access router. Many will. I ask them to tell me what functions the access router includes from the things we talked about in class. This gets them into the fact that it is a router and an access point all in one. It is a router because their home is a single network and must connect to the access line leading to the ISP. The cable or ADSL modem? That is a termination box for the cable or telephone company. It converts between access line signals and home network signals.