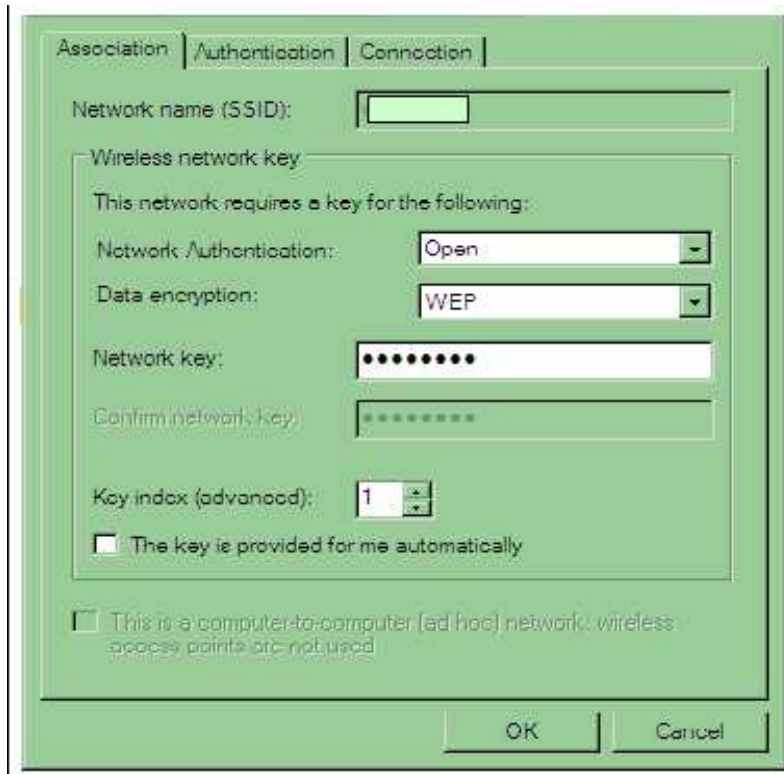


Chapter 7 - QUIZ – Basic Wireless Concepts and Configuration

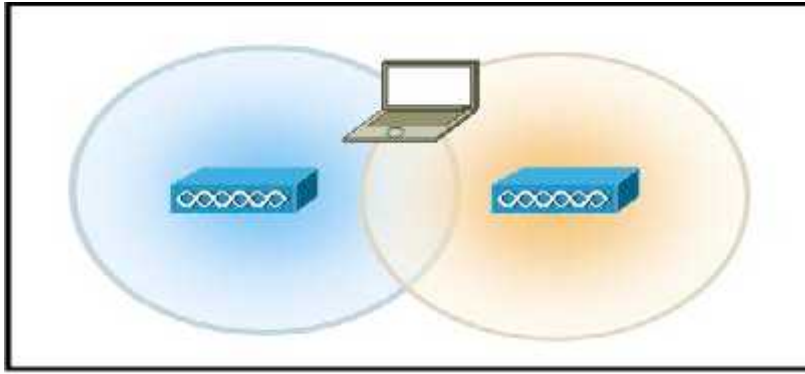
1. Match the wireless standard on the left to the appropriate description on the right.
 - A. 802.11a → Uses the 5.7 Gigahertz band with less interference, but obstructions can affect performance and limit range.
 - B. 802.11b → Specifies data rates of 1, 2, 5.5, and 11 Megabits per second due to differently sized spreading sequences specified in the DSSS modulation technique.
 - C. 802.11g → Uses the 802.11 MAC address, but with higher data rates in the 2.4 Gigahertz ISM band by using the OFDM modulation technique.
 - D. 802.11n → Uses multiple radios and antennae at endpoints, each broadcasting on the same frequency to establish multiple streams.
2. Match the wireless device to the appropriate description.
 - A. Wireless NIC → Encodes a data stream onto an RF signal using the configured modulation technique
 - B. Access point → Connects multiple wireless clients or stations to the wired LAN.
 - C. Wireless router → Connects two separated, isolated wired networks together.
3. At which layer of the OSI model do wireless access points operate?
 - A. Physical
 - B. Data link
 - C. Network
 - D. Application
4. Which two steps are required for a wireless client to associate with an access point? (Choose two)
 - A. IP addressing
 - B. Wireless address translation
 - C. Wireless client authentication
 - D. Channel identification
 - E. Wireless client association
5. Which three WLAN client authentication types require a preprogrammed network key to be set on the client? (Choose three)
 - A. Open with data encryption disabled
 - B. Shared with data encryption algorithm WEP
 - C. WPA with data encryption algorithm TKIP
 - D. WPA-PSK with data encryption algorithm TKIP
 - E. WPA2 with data encryption algorithm AES
 - F. WPA2-PSK with data encryption algorithm AES
6. Which two items contribute to the security of a WLAN? (Choose two)
 - A. WPA2
 - B. Use of multiple channels
 - C. Hiding the SSID
 - D. Open authentication
 - E. AES
7. Which term is used for products that are tested to be interoperable in both PSK and 802.1X / Extensible Authentication Protocol (EAP) operation for authentication?
 - A. Personal mode
 - B. WPA2 compatible
 - C. RADIUS authenticated
 - D. Enterprise mode
 - E. Pre-shared key authenticated

8. To help ensure a secure wireless network, most enterprise networks should follow which IEEE standard?
- A. 802.11a
 - B. 802.11b
 - C. 802.11c
 - D. 802.11i
9. A screenshot of the Linksys GUI shows the wireless security screen and the network authentication entry area with Open as the default. Other options are listed as potential answers. Which method of network authentication provides the highest level of security?



- A. Open
 - B. Shared
 - C. WPA
 - D. WPA-PSK
10. Which two combinations of 802.11b RF channels would allow two wireless AP's to operate simultaneously in the same room with no channel overlap? (Choose two)
- A. Channels 10 and 6
 - B. Channels 9 and 6
 - C. Channels 8 and 5
 - D. Channels 7 and 2
 - E. Channels 6 and 2
 - F. Channels 6 and 11
11. Why do cordless devices, such as telephones, sometimes interfere with wireless access points?
- A. These devices operate at similar frequencies.
 - B. These devices operate at the same frequencies and have higher RF power settings.
 - C. These devices flood the entire frequency spectrum with low power noise, which may cause loss of signal for wireless devices trying to connect with an access point.
 - D. The signal from the cordless device is non-polarized and combines with the access point polarized signal, thus reducing overall signal strength.

12. A laptop computer is positioned at the intersection of two AP range areas that overlap. What is the recommended overlap between the two wireless access points to provide proper connectivity for users?



- A. 5 to 10%
B. 10 to 15%
C. 15 to 20%
D. 20 to 25%
13. Match the authentication method from the left column to the correct encryption algorithm or security protocol it would use on the right.
- | | | |
|---------|---|----------|
| A. Open | ➔ | Disabled |
| B. WEP | ➔ | RC4 |
| C. WPA | ➔ | TKIP |
| D. WPA2 | ➔ | AES |
14. Which WLAN client settings would be reviewed to resolve encryption problems with the access point?
- A. Wireless mode (802.11a, 802.11b, 802.11g)
B. Wireless network card drivers
C. Channel selection for ad hoc network
D. TCP/IP properties
E. Wireless association properties