

Name _____ Date _____

Module 13 - WLAN Configuration

Switching, Routing, and Wireless Essentials – Semester 2

Student Version

Module 13 Sections:

- 13.0 Introduction
- 13.1 Remote Site WLAN Configuration
- 13.2 Configure a Basic WLAN on the WLC
- 13.3 Configure a WPA2 Enterprise WLAN on the WLC
- 13.4 Troubleshoot WLAN Issues
- 13.5 Module Practice and Quiz

Required Materials:

Reading Organizer

Packet Tracer Activities: 13.2.7 - Configure a Basic WLAN on the WLC
 13.3.12 - Configure a WPA2 Enterprise WLAN on the WLC
 13.4.5 - Troubleshoot WLAN Issues

Labs: 13.1.11 - Configure a Wireless Network

Module's 10 - 13 Exam

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Name _____ Date _____

Module 13 - WLAN Configuration

Reading Organizer

Student Version

Note: The Reading Organizer has weighted scoring. Any question with the word **explain, define, or describe** in it is expected to have a longer answer and is worth two points each.

After completion of this module, you should be able to:

- Configure a WLAN to support a remote site.
- Configure a WLC WLAN to use the management interface and WPA2 PSK authentication.
- Configure a WLC WLAN to use a VLAN interface, a DHCP server, and WPA2 Enterprise authentication.
- Troubleshoot common wireless configuration issues.

13.1 Remote Site WLAN Configuration

1. Small office and home routers are sometimes called an _____

2. What do Small office and home routers typically include?

- a.
- b.
- c.

3. What do wireless routers typically provide?

- a.
- b.
- c.
- d.

4. How can you gain access to the wireless router's configuration GUI?

5. What is a common IP address for many wireless router manufacturers?

6. The word admin is commonly used as the default _____ and _____.

7. List the basic network setup steps for a router.

1.

2.

3.

4.

5.

6.

8. List the basic wireless setup steps.

1.

2.

3.

4.

5.

6.

9. What is the approximate range of a wireless router?

a. Indoors - _____

b. Outdoors - _____

10. What can you do to extend the range of a wireless router?

11. Explain what Network Address Translation (NAT) does.

12. Explain what happens when you configure Quality of Service (QoS).

13. Wireless routers typically block _____ and _____ ports to prevent unauthorized access in and out of a LAN.

14. What does port triggering allow?

13.2 Configure a Basic WLAN on the WLC

15. What do the following acronyms stand for?

a. AP -

b. LAP -

c. LWAPP -

d. WLC -

16. Describe what the Network Summary page is and does.

17. List the basic WLAN configuration steps on a WLC.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

13.3 Configure a WPA2 Enterprise WLAN on the WLC

18. What is SNMP Used for?

19. The WLC has five physical ports for data traffic. Each physical port can be configured to support multiple _____ each on its own virtual interface.

20. List the steps for VLAN interface configuration on a WLC.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

21. List the steps required for DHCP scope configuration.

- 1.
- 2.
- 3.
- 4.
- 5.

22. List the steps required to configure a new WLAN on a WLC.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

13.4 Troubleshoot WLAN Issues

23. What are the six main steps to troubleshooting?

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

24. When troubleshooting a WLAN, a _____ is recommended.
25. If there is no WLAN connectivity, there are several things you can check. Describe one thing you can check.
26. Describe one of the options you can check if the PC is operational but the wireless connection is performing poorly
27. What are two options you can use to optimize and increase the bandwidth of 802.11 dual-band routers and Aps.
- a.
 - b.
28. List one of the several reasons for using a split-the-traffic approach:
29. By default, dual-band routers and APs use the same network name on both the 2.4 GHz band and the 5 GHz band. What is the simplest way to segment traffic for the devices?
30. Explain why is it important to upgrade the firmware on APs?