



## Objectives

1. Add a wireless router to the network.
2. Configure the wireless router.
3. Add wireless connectivity to a PC.
4. Verify end-to-end connectivity

## Equipment

- Same equipment and file used in Laboratory Activity # 15
- Linksys WRT300N Router
- 2 Laptop PCs with wireless module
- 1 PC-PT



### **Task 1: Add a Wireless Router to the Network**

Step 1. Add a Linksys WRT300N to the network.

- Click the Linksys router to open the configuration GUI. Select the Config tab and set the Display Name to Free Wi-fi

Step 2. Connect the Internet interface to switch.

- Connect the Internet interface of the Linksys router to the Fa0/7 interface of the switch.

### **Task 2: Configure Options in the Linksys Setup Tab**

Step 1. Set the Internet connection type to static IP.

- Click the Linksys router, and then select the GUI tab.
- In the Setup screen for the Linksys router, locate the Internet Connection Type option under Internet Setup. Click the drop-down menu and select Static IP from the list.

Step 2. Configure the VLAN 99 IP address, subnet mask, and default gateway for Free Wi-fi.

- Set the Internet IP address to 172.17.99.25.
- Set the subnet mask to 255.255.255.0.
- Set the default gateway to 172.17.99.1.

Step 3. Configure the router IP parameters.

- In the Setup screen, scroll down to Network Setup. For the Router IP option, set the IP address to 172.17.40.1 and the subnet mask to 255.255.255.0.
- Under the DHCP Server Setting, make sure that the DHCP server is enabled.

Step 4. Save settings.

### **Task 3: Configure Options in the Linksys Wireless Tab**

Step 1. Set the network name (SSID).

- Click the Wireless tab.
- Under Network Name (SSID), rename the network from Default to ITCS322.
- Click Save Settings.

Step 2. Set the security mode.

- Click Wireless Security.
- Change Security Mode from Disabled to WEP.
- Using the default Encryption of 40/64-Bit, set Key1 to 1234567890
- Click Save Settings.

**Task 4: Configure Options in the Linksys Administration Tab**

Step 1. Set the router password.

- Click the Administration tab.
- Under Router Access, change the router password to itcs322. Re-enter the same password to confirm.

Step 2. Enable remote management.

- Under Remote Access, enable remote management.
- Click Save Settings.

**Task 5: Add Wireless Connectivity to a Laptop**

Step 1. Add 2 Laptop-PTs

- Install a Linksys-WPC300N module on both devices.
- Add wireless connectivity on both devices.
  - Go to desktop.
  - Select PC and configure.

**Task 6: Test connectivity.**

Step 1. Test connectivity between different devices

Source	Destination	Result			
PC1	PC2	<input type="radio"/>	Fail	<input type="radio"/>	Successful
PC1	Laptop1	<input type="radio"/>	Fail	<input type="radio"/>	Successful
PC2	Laptop2	<input type="radio"/>	Fail	<input type="radio"/>	Successful
Router	WRT300N	<input type="radio"/>	Fail	<input type="radio"/>	Successful

**Task 7: Configure the new VLAN in the Switch and the Router**

**Task 8: Save the Topology**

- Format : <Lastname\_Class code>\_Laboratory 17
- *Make sure to strictly follow the naming convention*
- *For students with the same lastname, kindly use the format : <LastnameInitial\_Class code>\_Laboratory 17*

**Task 9: Upload your exercise file.**

- Using our offline version – myvle.slu.edu.ph, upload your file.

**Task 10: Kindly write down your configuration for each NEW device**

Host	Gateway	MAC Address	IP Address	Subnet Mask
Laptop1				
Laptop2				
WRT300N				

**Task 11: Diagram Your Network**

- Kindly sketch and label your diagram. Include labels containing subinterfaces in router and switch.

Criteria	Score	
1. Proper use of devices and equipment.	5	
2. Followed prescribed specifications.	5	
3. Correct configuration of devices.	5	
4. Devices are functioning per specification and configuration	10	
5. Laboratory activity generated the required output.	15	
6. Finished activity within time-frame.	5	
Total	100	