15.5.2 Lab: Configure Wireless Router

Introduction

Print and complete this lab.

In this lab, you will configure and test the wireless settings on the Linksys WRT300N.

Recommended Equipment

- A computer with Windows XP Professional or Windows Vista
- A Wireless NIC installed
- An Ethernet NIC installed
- Linksys WRT300N Wireless Router
- Ethernet patch cable

Step 1

Ask the instructor for the following information that is used during the lab. Router Static IP Information:

IP address

Subnet mask _____

Gateway			
Gateway			

DNS ______

SSID Values: New SSID _____

Wireless Security: Pre-shared key _____

Important: Only use configurations assigned by the instructor.

Step 2

Connect the computer to one of the **Ethernet** ports on the wireless router with an Ethernet patch cable.

Plug in the power of the wireless router. Boot the computer and log in as an administrator.

Step 3

Open the command prompt.

Type ipconfig /renew.

What is the default gateway for the computer?

Step 4

Open Internet Explorer. Type the IP address of your default gateway in the "Address" field, and then press **Return**.

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The "Connect to" window appears.

Connect to 192.168	3.1.1 ? ×
	GET
WRT300N	
<u>U</u> ser name:	£
Password:	
	Remember my password
	OK Cancel

Type "admin" in the "Password:" field.

The Setup screen appears.

Step 5

What is the Internet Connection Type assigned to the router?

To configure the router with a static IP address, click the dropdown menu **Internet Connection Type** and select **Static IP**.

						Wireless-N	Broadband Router
Setup	Setup	Wireless	Secu	rity	Access Restrictions	Applications Gaming	& Administration
	Basic Setur		DDNS	1	MAC Address Clone	• 1 /	Advanced Routing
Internet Setup							
Internet Connection Type	Autiomatic C Autiomatic C	Configuration Configuration	- DHCP 💙 - DHCP				<u>Help</u>
Optional Settings (required by some Internet Service Providers)	Static IP PPPoE Telstra Cable PPTP L2TP	e					
	MTU :		Auto 🗸	Size	e: 1500		

Enter the following static IP information provided by the instructor (step 1): Internet IP Address, Subnet Mask, Default Gateway, and DNS 1.

						Wireless-N Br	oadband Router
Setup	Setup Wir	eless	Secur	ity	Access Restrictions	Applications & Gaming	Administration
	Basic Setup	T	DDNS	1	MAC Address Clone	e Adva	inced Routing
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	Internet IP Addres	ss: (0.0	. 0	. 0		
	Subnet Mask:	(0.0	. 0	. 0		
	Default Gateway:	C	0.0	. 0	. 0		
	DNS 1:	C	0.0	. 0	. 0		
	DNS 2 (Optional):	C	0.0	. 0	. 0		
	DNS 3 (Optional):	(0.0	. 0	. 0		

Click Save Settings.

The "Settings are successful" screen appears.

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		-
	Settings are successful.	
	Continue	
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Click **Continue**. Keep the router configuration page open.

Step 6

Open the command prompt again.

Type **ipconfig /all**, and record the following information.

Computer IP information:

IP address _____

Subnet ma	ask		
Gateway _		 	

DNS _____

Use this information to configure the wireless NIC with static IP information.

General You can get IP settings assigned this capability. Otherwise, you nee the appropriate IP settings.	automatically if your network supports ed to ask your network administrator for
Obtain an IP address autom O Use the following IP address	atically s:
IP address:	
Subnet mask:	
Default gateway:	
Obtain DNS server address Ottain DNS server Use the following DNS server Preferred DNS server: Alternate DNS server:	automatically ar addresses:
Aitemate DNS server:	Advanced

Save these settings.

Step 7

Click the "Wireless" tab.

Click Network Mode dropdown menu.

					Wirel	ess-N Br	oadband Router
Wireless	Setup	Wireless	Security	Acces Restricti	s Applica ons Gar	ations & ning	Administration
	Basic Wirele	ss Settings	Wireless Se	ecurity	Wireless MAC F	ilter	Advanced Wireless
Basic Wireless Settings							
	Network Mod	de :	Mixed	- X			Help
	Network Nar	me (SSID) :	BG-Mixed				
	Radio Band :		Wireless-G (Wireless-B (Only el Only	*		
	Wide Channe	el :	Wireless-N C Disabled	Only			
	Standard Ch	annel:	1 - 2.412GH	ZV			
	SSID Broadc	ast :	Enabled	O Disab	led		
			Sa	ve Settings	Cancel Cha	nges	

What 802.11 technologies are supported?

Choose "Mixed" in the "Network Mode:" drop-down box.

What is the default SSID for the wireless router?

Type "cisco#" in the "Network Name (SSID):" field, where # is the number assigned by your instructor.

Click Save Settings > Continue.

Close Internet Explorer.

Step 8

Unplug the Ethernet cable from the computer.

View wireless networks associated with the wireless adapter configured for the computer.

What wireless network(s) are available?

Choose **cisco#**, and then click the **Connect** button.

Open Internet Explorer. Type the IP address of your default gateway in the "Address" field, and then press **Return**.

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The "Connect to" window appears.

Connect to 192.168	3.1.1 ? ×
	E C
WRT300N	
<u>U</u> ser name:	2
Password:	
	Remember my password
	OK Cancel

Type "admin" in the "Password:" field.

The Setup screen appears.

Disable SSID broadcast.

Click Save Settings > Continue.

					W	/ireless-N	Bro	adband Router
Wireless	Setup Wirele	ss Secu	ırity	Acces: Restriction	s Aj ons	pplications Gaming	8	Administration
	Basic Wireless Setting	is Win	eless Secu	urity	Wireless N	IAC Filter	I.	Advanced Wireless
Basic Wireless Settings								
	Network Mode :	Mixe	ed	*				Help
	Network Name (SSID)	: Cisc	0					
	Radio Band :	Auto	D		*			
	Wide Channel :	Auto	v					
	Standard Channel :	Auto	× 0					
	SSID Broadcast :	() E	nabled	Oisable	ed			
			Save	Settings	Cance	Changes		

Why would you disable SSID broadcast?

View wireless networks associated with the wireless adapter configured to the computer.

What wireless network(s) are available?

Click on the router configuration page so it is activated.

Enable SSID broadcast.

Click Save Settings > Continue.