# Answers: 8.1.2.10 Lab - Connect to a Router for the First Time

# Introduction

In this lab, you will configure basic settings on a wireless router.

# **Recommended Equipment**

- A computer with Windows installed
- An Ethernet NIC installed
- Wireless router
- Ethernet patch cable

## Step 1: Connect the computer to the router.

a. Ask the instructor for the following information that is used during the lab.

### Router Address Information:

IP address:

Subnet mask:

Router name:

#### **DHCP Server Setting Information:**

Start IP address:

Maximum number of users:

Static DNS 1 (optional):

#### Router Access:

Router Password:

Note: Only use configurations assigned by the instructor.

- b. Plug in the power of the wireless router. Boot the computer and log in as an administrator.
- c. Connect the computer to one of the Ethernet ports on the wireless router with an Ethernet patch cable.

**Note**: If this is the first time connecting to the lab router, follow these instructions to set a network location. This will be explained later in the course.

d. In the Set Network Location window, select Public network.



e. Click Close to accept the network location Public.



f. Open a command prompt and type **ipconfig /renew**.

What is the default gateway for the computer?

## Step 2: Log in to the router.

a. Open Internet Explorer. Type the IP address of your default gateway in the Address field, and then press Enter.



b. In the Windows Security window, type admin in the Password: field then click OK.

**Note**: If this user name and password combination does not work, as your instructor or refer to the documentation of the router for the correct user name and password for your router.

Windows Security	<b>x</b>						
The server 192.168.1.1 is asking for your user name and password. The server reports that it is from Wireless-N Broadband Router.							
Warning: Your user name and password will be sent using basic authentication on a connection that isn't secure.							
() () () ()	User name Password Remember my credentials						
	OK Cancel						

c. The Setup screen appears.

Setup	Setup	Wireless	s Secu	ırity	A Res	ccess trictions	Applic & Gam	ations	Administration	Status
	Basic Setup		UU	15	4	MAC Address	Clone		Advanced Routing	
Internet Setup										
Internet Connection Type	Automa	Automatic Configuration - DHCP v						<u>Help</u>		
Optional Settings	Router Na	ame:								
(required by some isrs)	Host Nam	e:								
	Domain N	ame:								
	MTU:		Auto N							
	Size:		1500							

In the Internet Setup section, what is the Internet Connection Type assigned to the router?

d. Make sure the Internet Connection Type is set to Automatic Configuration – DHCP.

e. Locate the Network Setup section. Verify that the DHCP Server is enabled.

Network Setup		
Router IP	Local IP Address: 192 . 168 . 1 . 1	
	Subnet Mask: 255.255.0 v	
Network Address Server Settings (DHCP)	DHCP Server:	
	Starting IP Address: 192.168.1. 100	
	Maximum Number of 50 DHCP Users:	
	Client Lease Time: 0 minutes (0 means one day)	
	Static DNS 1: 0 . 0 . 0	

What is the Router IP address and the subnet mask?

#### **Record the DHCP Server Settings:**

Start IP Address:

Maximum Number:

IP Address Range:

- f. Enter the Router Address and DHCP Server Setting information provided by the instructor: IP Address, Subnet Mask, Start IP Address, and Maximum Number of Users.
- g. Click Save Settings.

Save Settings Cancel Changes

h. The router may need to reboot at this time. If necessary, reboot the router and log back in.

#### Step 3: Find the IP address information of the computer.

- a. Open a command prompt.
- b. Type **ipconfig /all**, and record the following information.

#### Computer IP information:

IP address:

Subnet mask:

Gateway:

DNS (optional):

c. Click Start > Control Panel > Network and Sharing Center > Change adapter settings.

Note: In Windows Vista, click Start > Control Panel > Network and Sharing Center > Manage network connections.

d. In the **Network Connections** window, right-click the correct Ethernet adapter and select **Properties**. Click **Internet Protocol Version 4 (TCP/IPv4)** and select **Properties**. e. Use the recorded information to configure the NIC with static IP information. Click **OK**, and click **Close**.

eneral You can get IP settings assigned a this capability. Otherwise, you nee for the appropriate IP settings.	utomatically if ed to ask your	your n networ	etwork s 'k admini	supports istrator
🔘 Obtain an IP address automa	tically			
Our of the following IP address:				
IP address:		12.5	2	
Subnet mask:		10		
Default gateway:	1	913	14	
Obtain DNS server address a	utomatically			
Output the following DNS server	addresses:			
Preferred DNS server:				
Alternate DNS server:		190		
Validate settings upon exit			Adva	anced

Step 4: Change QoS settings.

- a. Click the Applications& Gaming tab and then select QoS.
- b. Make sure **WMM Support** is enabled. Click **Save Settings > Continue**, if any changes were made.

Wireless QoS	
	WMM Support: Enable v (Default : Disable)
	No Acknowledgement: Disable v (Default : Disable)
	Save Settings Cancel Changes

## Step 5: Change router password.

a. Click the Administration tab and then select Management.

b. Type Network in the Router Password: and Re-enter to confirm: fields.

Administration	Setup Wirele:	ss Security Acces Restricti	s Applications ons & Gaming	Administration Status
	Management	Log   Diagnostics   Factor	y Defaults   Firmware U	pgrade   Config Management
Router Password				
Local Router Access	Password:	•••••		<u>Help</u>
	Re-enter to confirm:	•••••		
Web Access	Access Server:	HTTP HTTPS		
	Wireless Access Web:	Enable     Disable		
Remote Router Access	Remote Management:	O Enable		
	Management Port:	8080		
	Use https:			
UPnP				
	UPnP:	Enable     Disable		
		Save Settings	Cancel Changes	

- c. Click Save Settings > Continue.
- d. Log back into the router using the new IP address and password.What IP address did you enter into the URL field of the browser?

What password did you use to access the router GUI?

#### Step 6: Reset the router to the original configuration.

a. Unless stated otherwise by the instructor, restore the router back to factory default if the option is available.

A							
Administration	Setup	Wireless	Security	Access Restrictions	Applications & Gaming	Administration	Status
	Management	I L	og   Diagnosti	s   Factory Default	s   Firmware l	Ipgrade   Config N	lanagement
Factory Defaults	Restore Fa Defaults:	actory (	● Yes C	No		<u>Help</u>	
			S	ave Settings Ca	ncel Changes		

If default restoration is not available, return the configurations to the following settings or settings provided by the instructor.

#### **Router Address Information:**

- o IP address: ..... 192.168.1.1
- o Subnet mask: ..... 255.255.255.0
- o Router name: ..... Router

#### **DHCP Server Setting Information:**

- o Start IP address: ..... 192.168.1.100
- Maximum number of users:.. 50
- Static DNS 1 (optional): ..... 0.0.0.0 or leave it blank

#### **Router Access:**

- o Router Password: ..... Admin
- b. Navigate to the Internet Protocol Version 4 (TCP/IPv4) Properties window on the computer. Select Obtain an IP address automatically and Obtain DNS server address automatically. Click OK, and click Close.
- c. Close the browser, log off the computer, and turn off the router.