

IT Essentials 5.0

6.8.3.5 Lab - Connect to a Router for the First Time

Introduction

Print and complete this lab.

In this lab, you will configure basic settings on the Linksys E2500.

Recommended Equipment

- A computer with Windows 7, Windows Vista, or Windows XP Professional
- An Ethernet NIC installed
- Linksys E2500 Wireless Router
- Ethernet patch cable

Step 1

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 _____

Important: Only use configurations assigned by the instructor.

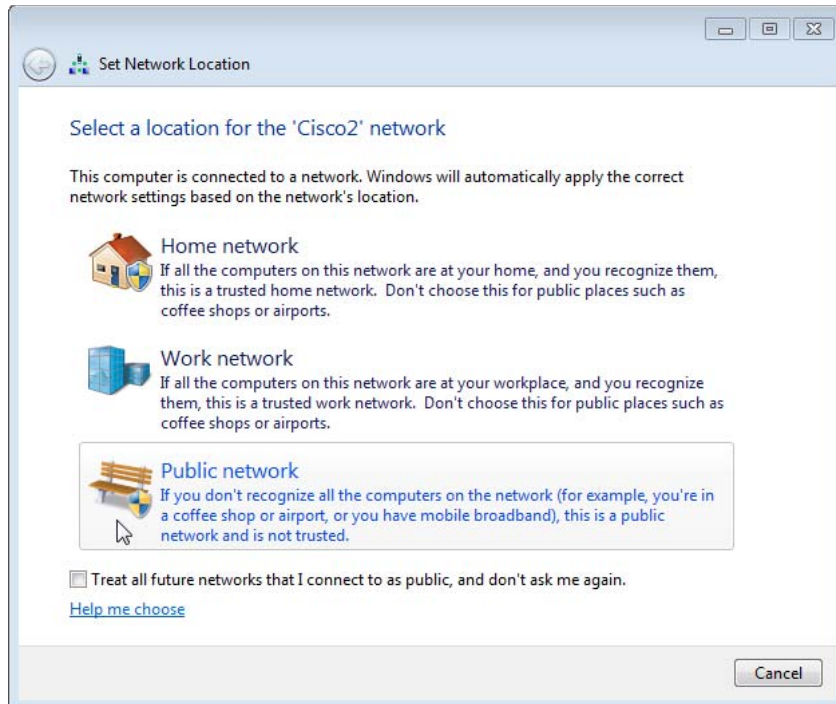
Step 2

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

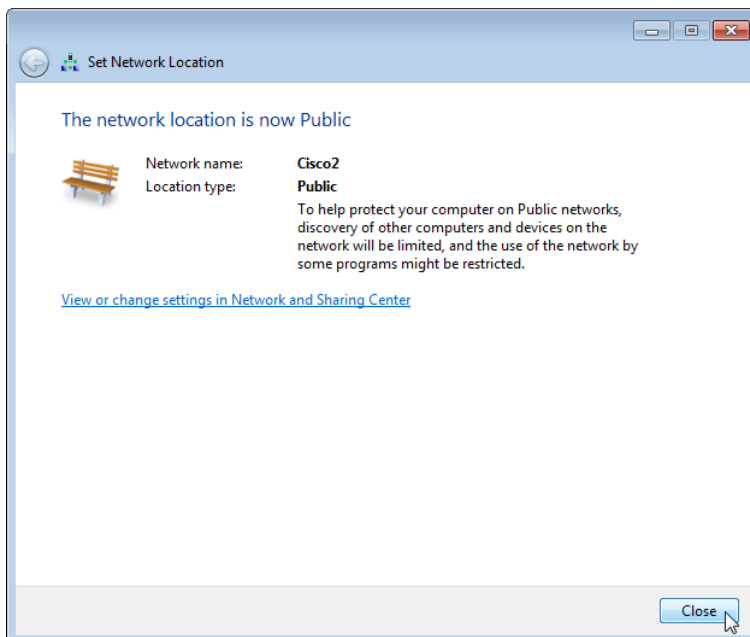
Connect the computer to one of the **Ethernet** ports on the wireless router with an Ethernet patch cable.

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

The “Set Network Location” window opens.



Select **Public network**.



Click **Close** to accept the network location Public.

Step 3

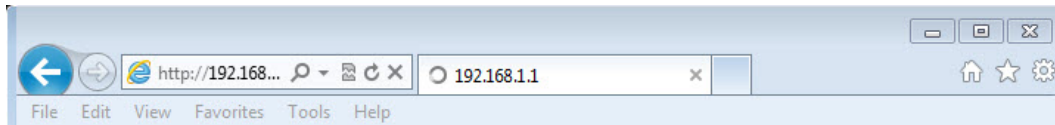
Open the command prompt.

Type **ipconfig /renew**.

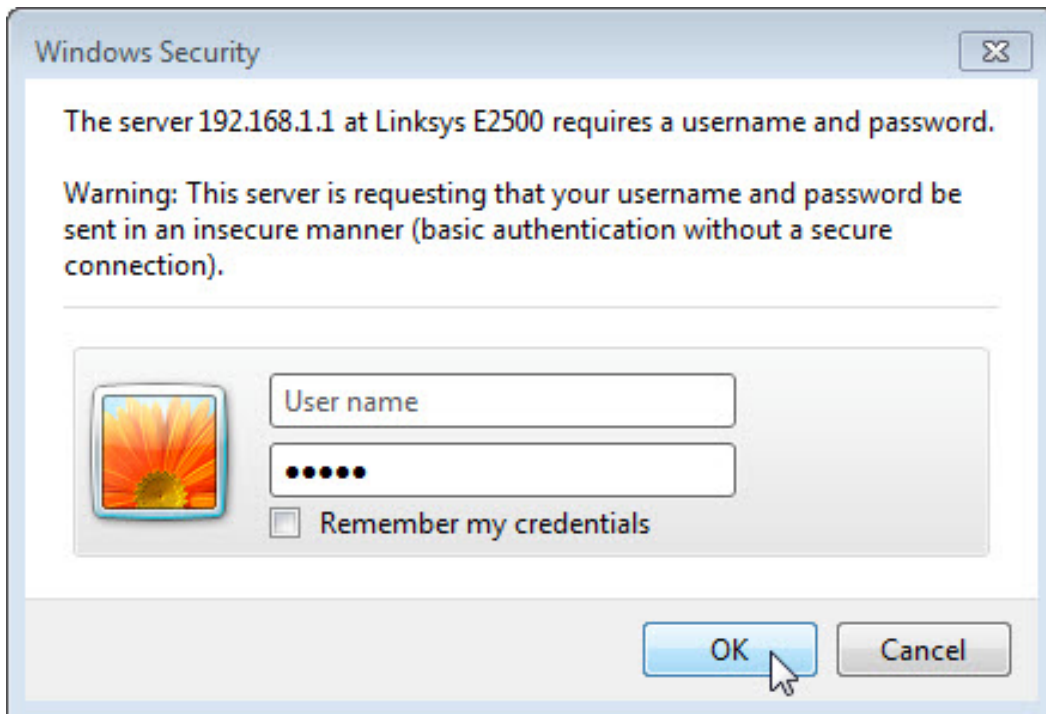
What is the default gateway for the computer?

Step 4

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



The “Connect to” window opens.



Type **admin** in the “Password:” field then click **OK**.

The “Setup screen” appears.

The screenshot shows the Cisco Linksys E2500 Setup interface. The top navigation bar includes 'Setup', 'Wireless', 'Security', 'Access Policy', 'Applications & Gaming', 'Administration', and 'Status'. The 'Setup' section is expanded to show 'Basic Setup', 'IPv6 Setup', 'DDNS', 'MAC Address Clone', and 'Advanced Routing'. The 'Internet Setup' section is active, showing 'Internet Connection Type' set to 'Automatic Configuration - DHCP'. Below this, there are fields for 'Host Name', 'Domain Name', and 'MTU' (set to 'Auto' with a size of '1500'). The 'Network Setup' section shows 'Router Address' with 'IP Address' (192.168.1.1), 'Subnet Mask' (255.255.255.0), and 'Router Name' (Cisco55842). The 'DHCP Server Setting' section shows 'DHCP Server' set to 'Enabled', 'Start IP Address' (192.168.1.100), 'Maximum Number of Users' (50), 'IP Address Range' (192.168.1.100 to 149), 'Client Lease Time' (0 minutes), and three 'Static DNS' fields (all 0.0.0.0) and 'WINS' fields (all 0.0.0.0). The 'Time Settings' section shows 'Time Zone' set to '(GMT-08:00) Pacific Time (USA & Canada)' and a checked box for 'Automatically adjust clock for daylight saving changes'. A 'Reboot' button is visible at the bottom. The 'Save Settings' and 'Cancel Changes' buttons are at the bottom right.

Internet Setup

What is the “Internet Connection Type” assigned to the router?

Make sure the “Internet Connection Type” is set to **Automatic Configuration – DHCP**.

Network Setup

What is the following for the “Router Address”:

IP Address

Subnet Mask

Router Name

What is the following for the “DHCP Server Setting”:

Start IP Address

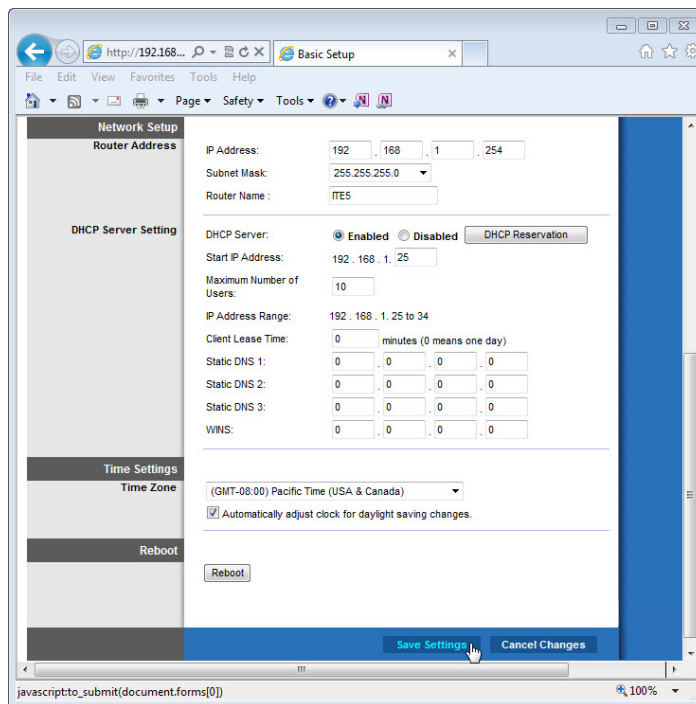
Maximum Number of Users

IP Address Range

Make sure DHCP is enabled.

Step 5

Enter the “Router Address” and “DHCP Server Setting” information provided by the instructor (step 1): IP Address, Subnet Mask, Router Name, Start IP Address, and Maximum Number of Users.



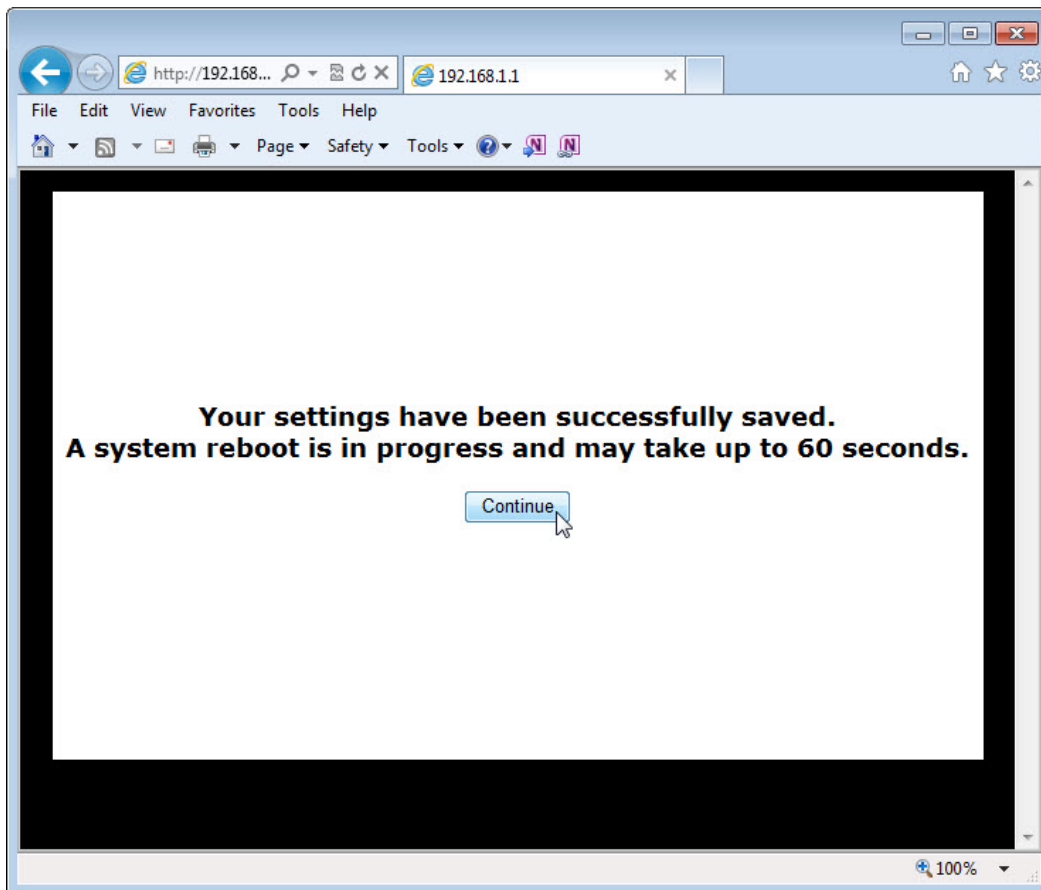
The screenshot shows the Cisco Basic Setup web interface. The browser address bar displays "http://192.168...". The page title is "Basic Setup". The interface is divided into several sections:

- Network Setup**
 - Router Address**
 - IP Address: 192 . 168 . 1 . 254
 - Subnet Mask: 255.255.255.0
 - Router Name: ITE5
 - DHCP Server Setting**
 - DHCP Server: Enabled Disabled
 - Start IP Address: 192 . 168 . 1 . 25
 - Maximum Number of Users: 10
 - IP Address Range: 192 . 168 . 1 . 25 to 34
 - Client Lease Time: 0 minutes (0 means one day)
 - Static DNS 1: 0 . 0 . 0 . 0
 - Static DNS 2: 0 . 0 . 0 . 0
 - Static DNS 3: 0 . 0 . 0 . 0
 - WINS: 0 . 0 . 0 . 0
- Time Settings**
 - Time Zone**: (GMT-08:00) Pacific Time (USA & Canada)
 - Automatically adjust clock for daylight saving changes.
- Reboot**
 -

At the bottom of the page, there are two buttons: and . The "Save Settings" button is highlighted with a mouse cursor.

Click **Save Settings**.

The “Your Settings have been successfully saved. A system reboot is in progress and may take up to 60 seconds.” screen appears.



Click **Continue**.

After the router reboots, you may need to log back into the router.

Step 6

Open the command prompt.

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

Computer IP information:

IP address _____

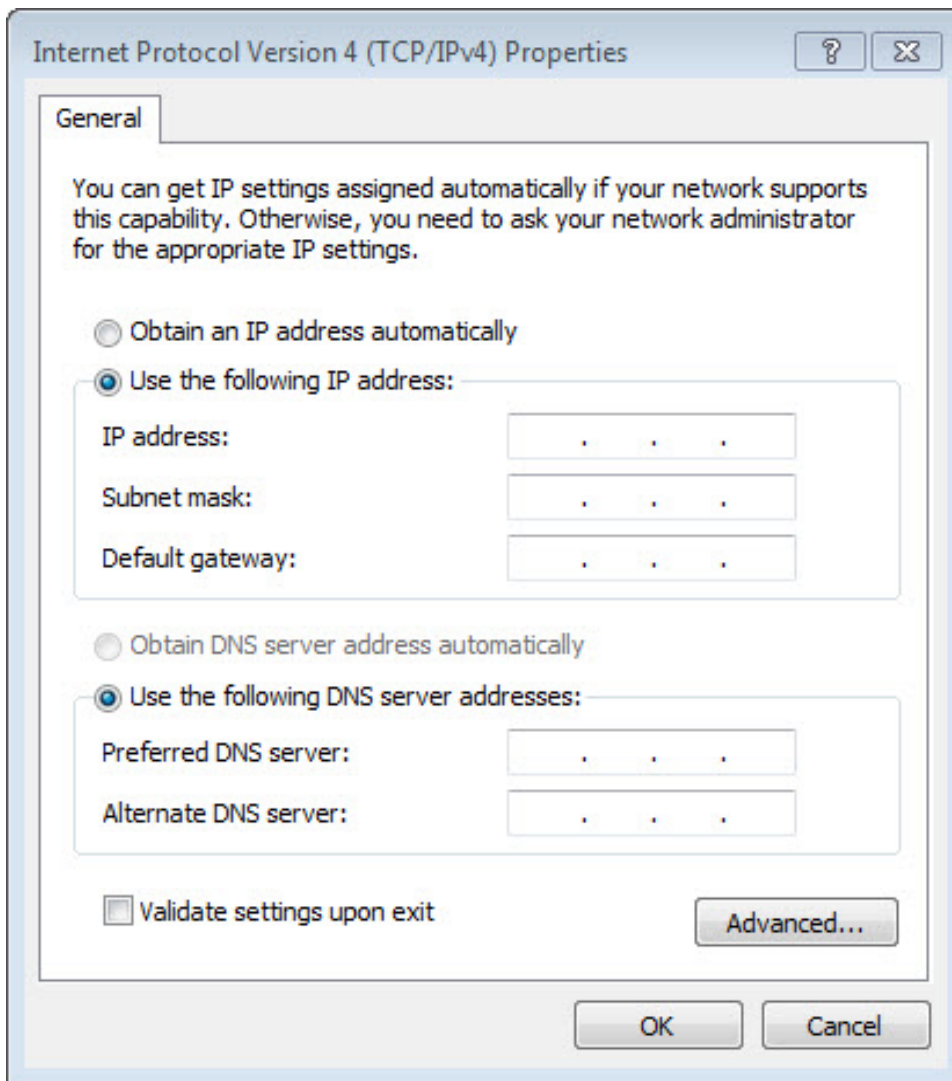
Subnet mask _____

Gateway _____

DNS (optional) _____

Open the “Internet Protocol Version 4 (TCP/IPv4) Properties” window.

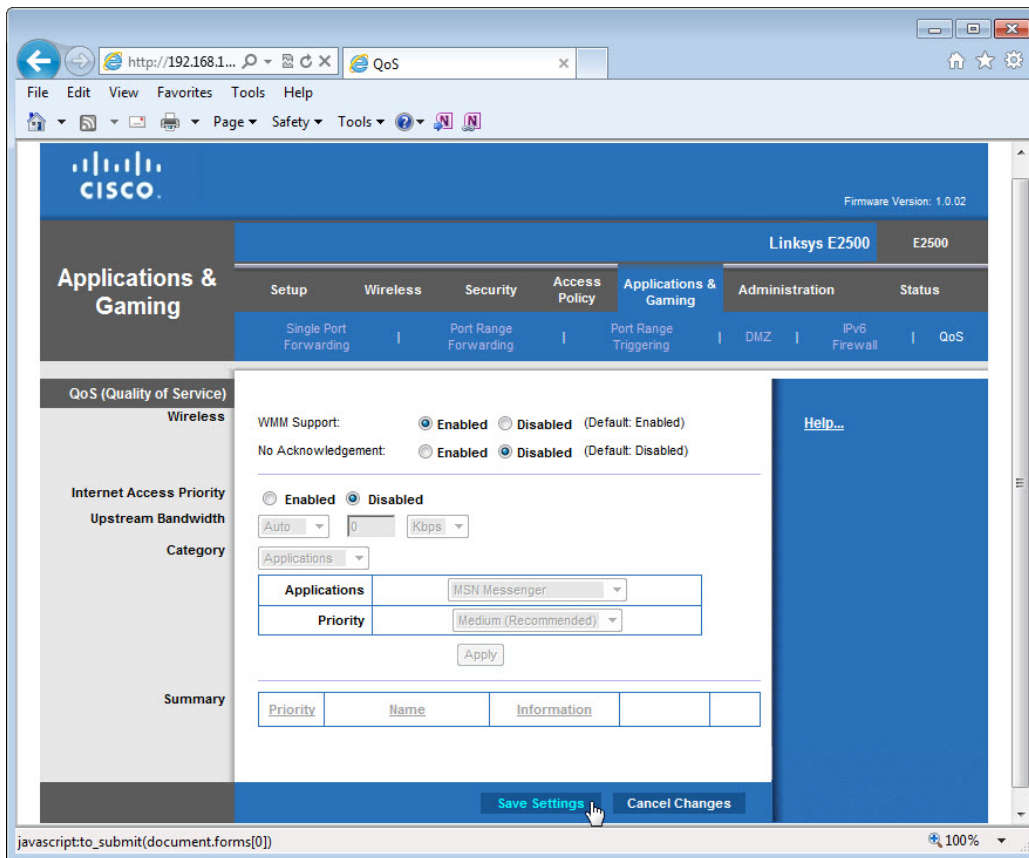
Use the recorded information to configure the NIC with static IP information.



Click **OK** > **OK**.

Step 7

Click the **Application & Gaming** tab and then select **QoS**.

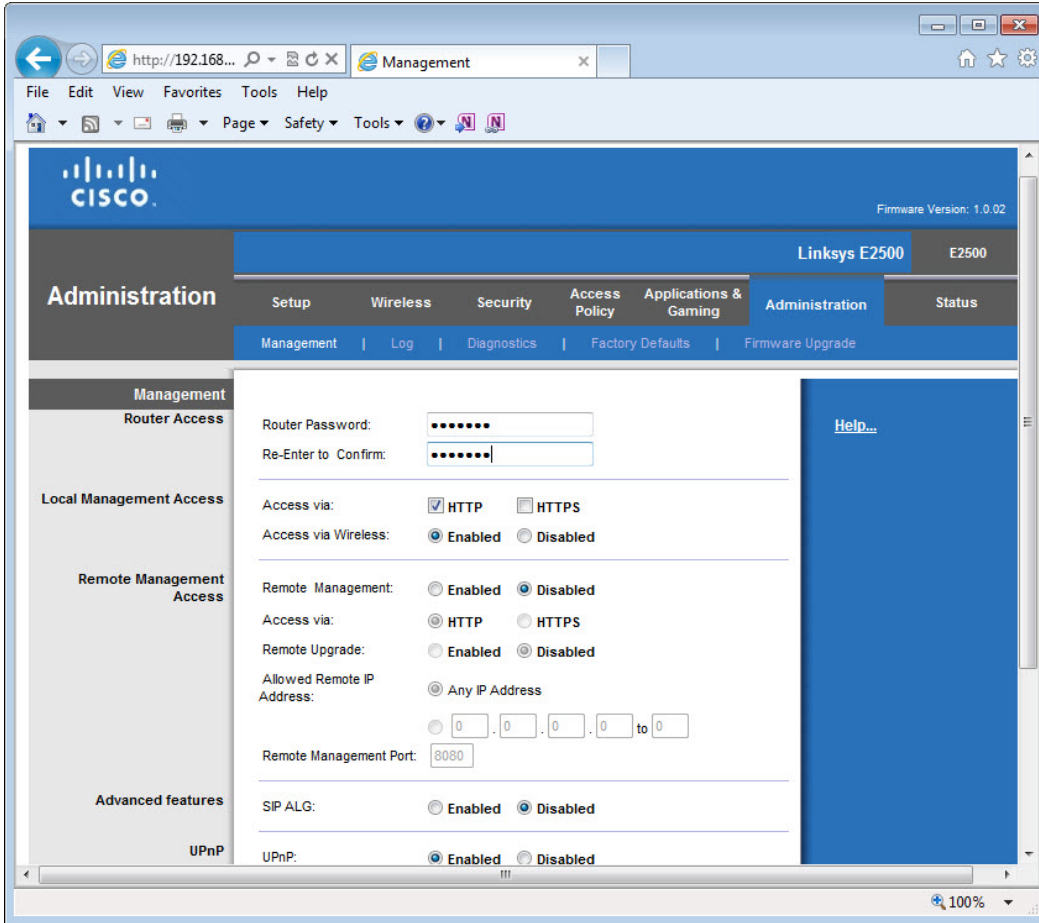


Make sure **WMM Support** is enabled. Click **Help** for more information about QoS settings.

Click **Save Settings > Continue**, if any changes were made.

Step 8

Click the **Administration** tab and then select **Management**.



Type **Network** in the “Router Password:” and “Re-Enter to Confirm:” fields.

Click **Save Settings > Continue**.

Close Internet Explorer.

Open up a new browser and log back into the router.

What IP address did you enter into the URL field of the browser?

What password did you use to access the router GUI?

Step 9

Return configurations to the following settings, unless stated otherwise by the instructor.

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

Router Address Information:

IP address _____ 192.168.1.1 _____

Subnet mask _____ 255.255.255.0 _____

Router name _____ Linksys _____

DHCP Server Setting Information:

Start IP address _____ 192.168.1.100 _____

Maximum number of users _____ 50 _____

Static DNS 1 (optional) _____ blank _____

Router Access:

Router Password _____ Admin _____

Close the browser and log off the computer.