IT Essentials 5.0

10.2.4.10 Lab - Configure Wireless Security

Introduction

Print and complete this lab.

In this lab, you will configure and test the wireless settings on the Linksys E2500.

Recommended Equipment

- Two computers with Windows 7 or Windows Vista or Windows XP
- An Ethernet NIC installed in computer 1
- A Wireless NIC installed in computer 2
- Linksys E2500 Wireless Router
- Ethernet patch cable

Step 1

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

Default Login Information:

User Name (if any) _____

Password _____

Basic Wireless Settings:

Network Name (SSID) _____

Network Mode: _____

Channel: _____

Important: Only use configurations assigned by the instructor.

Note: Use computer 1 for all lab instructions unless stated.

Step 2

Connect computer 1 to an **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**.

What is the IP address for the computer?

What is the default gateway for the computer?

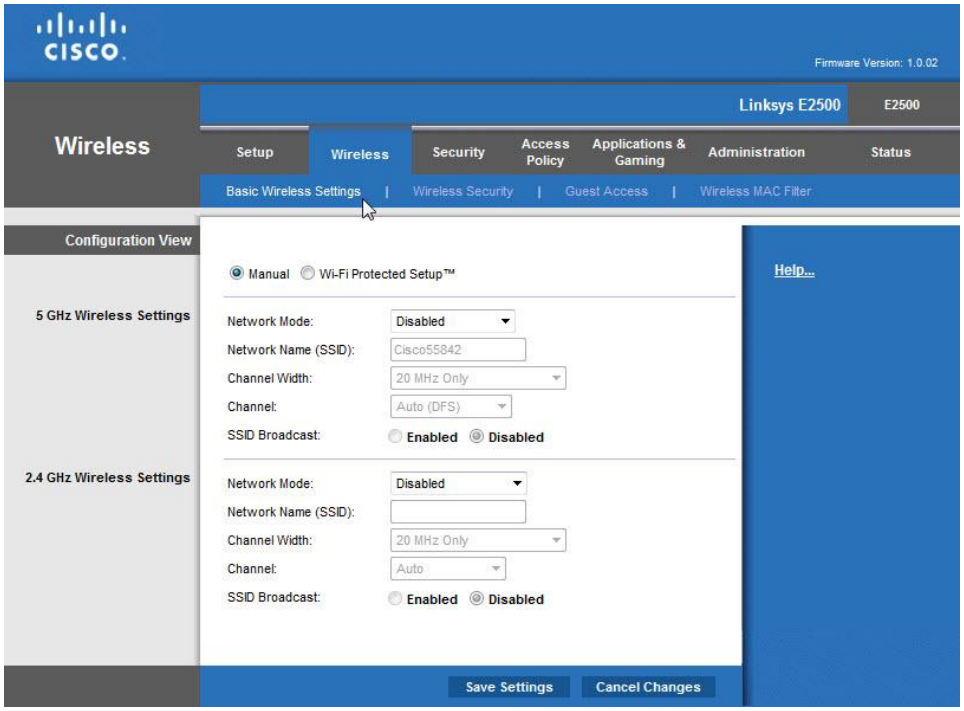
Step 4

Open Internet Explorer and connect to the wireless router.

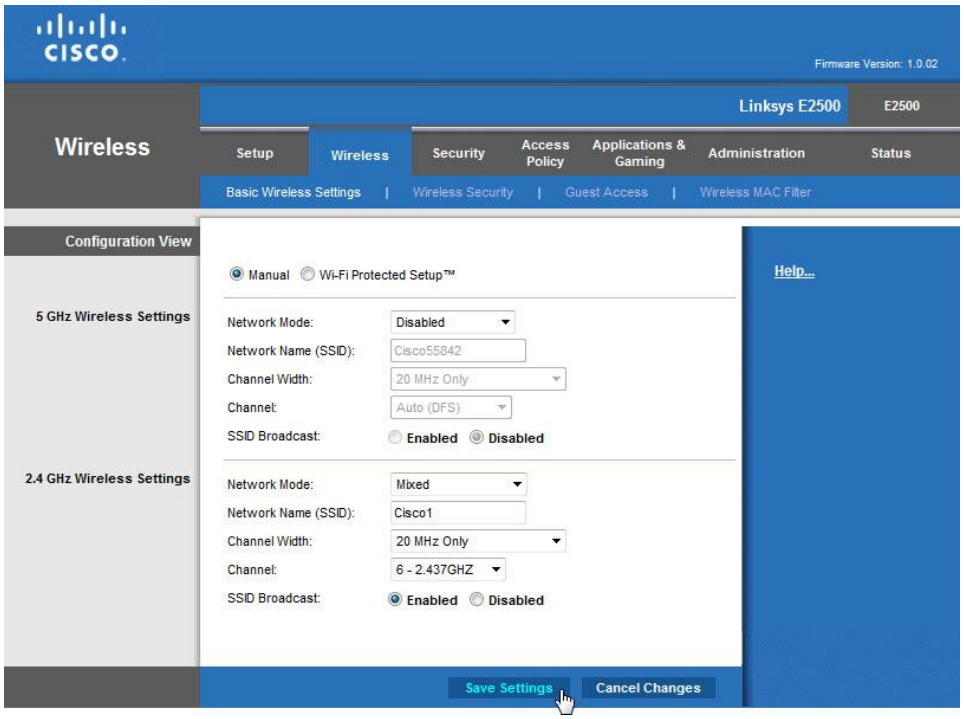
Type “**admin**” in the “Password:” field.

The “Setup screen” appears.

Click **Wireless** tab.



Under the Wireless tab, click **Basic Wireless Settings** if it is not selected.



Enter the following information for the 2.4 GHz wireless settings, unless stated otherwise by the instructor:

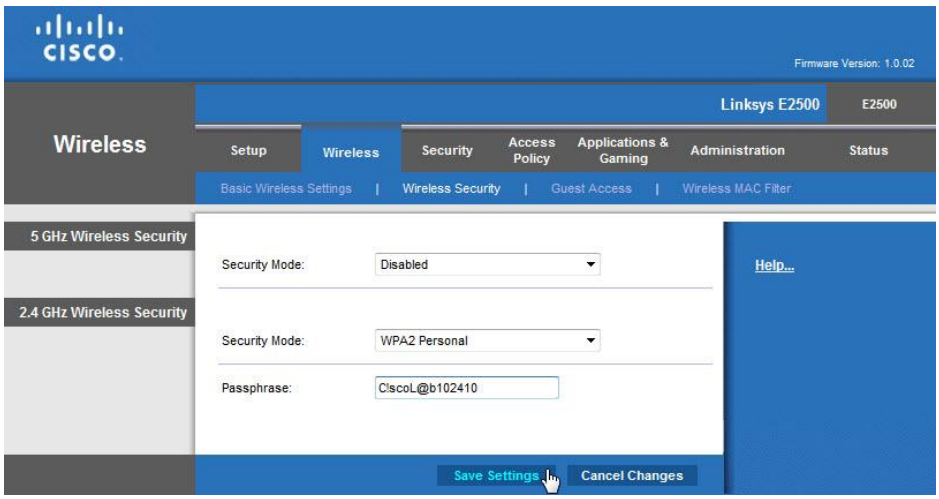
Network Mode: **Mixed**
Network Name (SSID): **Cisco#**, where # is a number assigned by the instructor
Channel: **#**, where # is a number assigned by the instructor
SSID Broadcast: **Enabled**

Click **Save Settings > Continue**.

Click the **Wireless Security** sub-tab.

Step 5

The “Wireless Security” screen appears.



Enter the following information for the 2.4 GHz wireless security settings, unless stated otherwise by the instructor:

Security Mode: **WPA2 Personal**.
Passphrase: **C!scoL&b102410**

Click **Save Settings > Continue**.

Keep Internet Explorer open to the Linksys router.

Step 6

Log in to computer 2, the wireless computer, as the administrator.

Connect to the wireless network. If asked for a security key or passphase enter: **C!scoL&b102410**

Open the command prompt.

Type **ipconfig /all**.

What is the IP address of the wireless NIC?

What is the physical address of the wireless NIC?

Type **ping *IPaddress***. Where ***IPaddress*** is the IP address of computer 1.

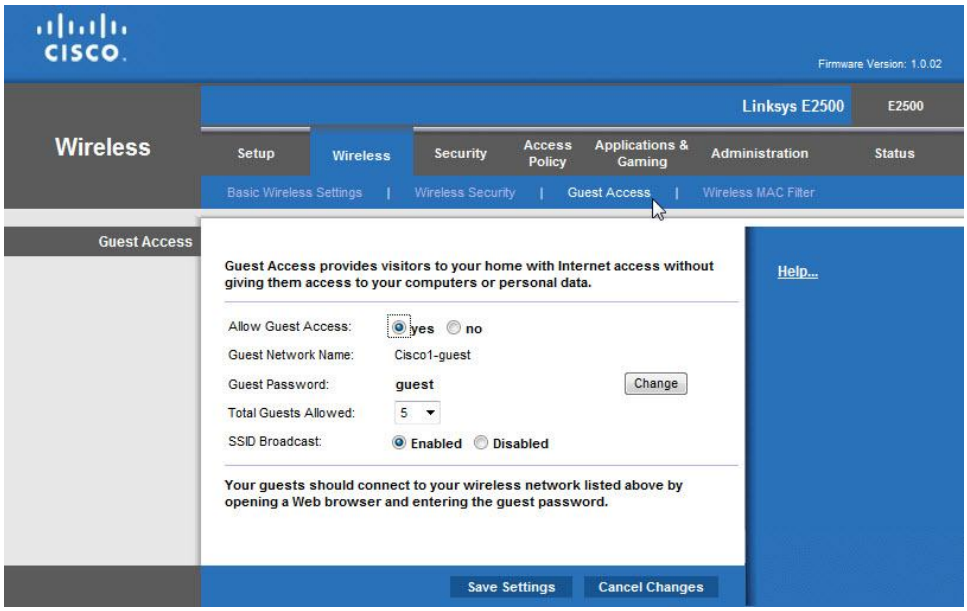
Was the ping successful?

Keep the command prompt window open.

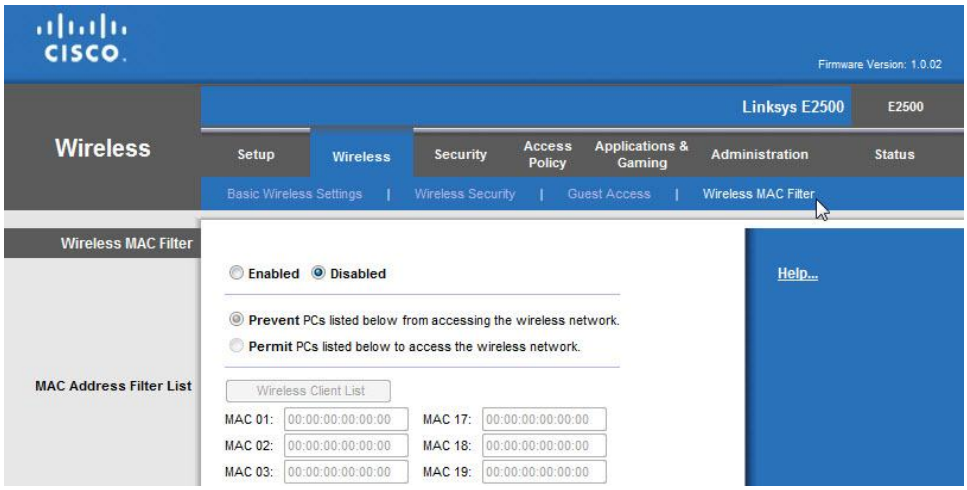
Step 7

From computer 1, make sure Internet Explorer is active.

Under the Wireless tab, click **Guest Access**.



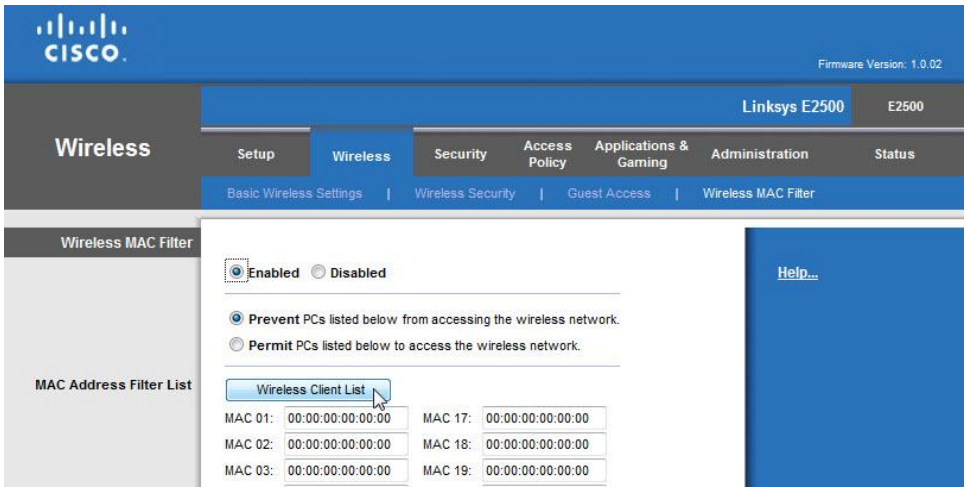
Why would you allow guest access?



Under the Wireless tab, click **Wireless MAC Filter**.

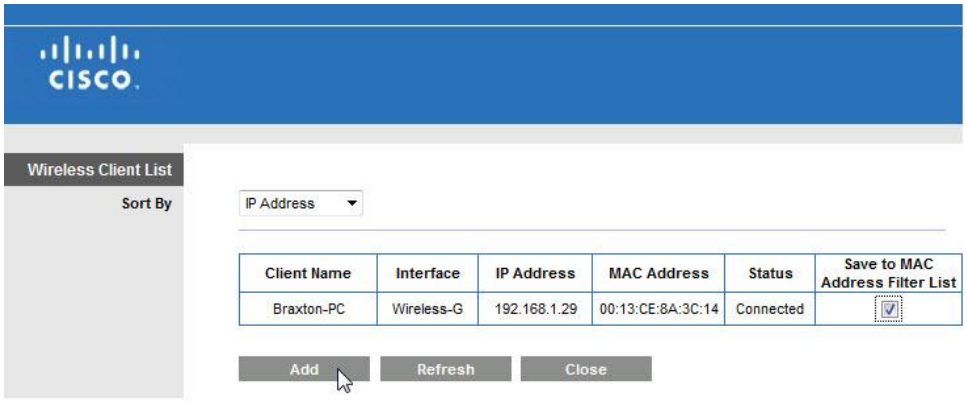
Step 8

The “Wireless MAC Filter” screen appears.



Select **Enabled > Prevent >** click **Wireless Client List**.

The “Wireless Client List” screen appears.



Select **Save to MAC Address Filter List** check box for computer 2.

Click **Add**.

What MAC address is now listed?

Click **Save Settings > Continue**.

Step 9

From computer 2:
In the command prompt window type **ping *IPaddress***. Where ***IPaddress*** is the IP address of computer 1.

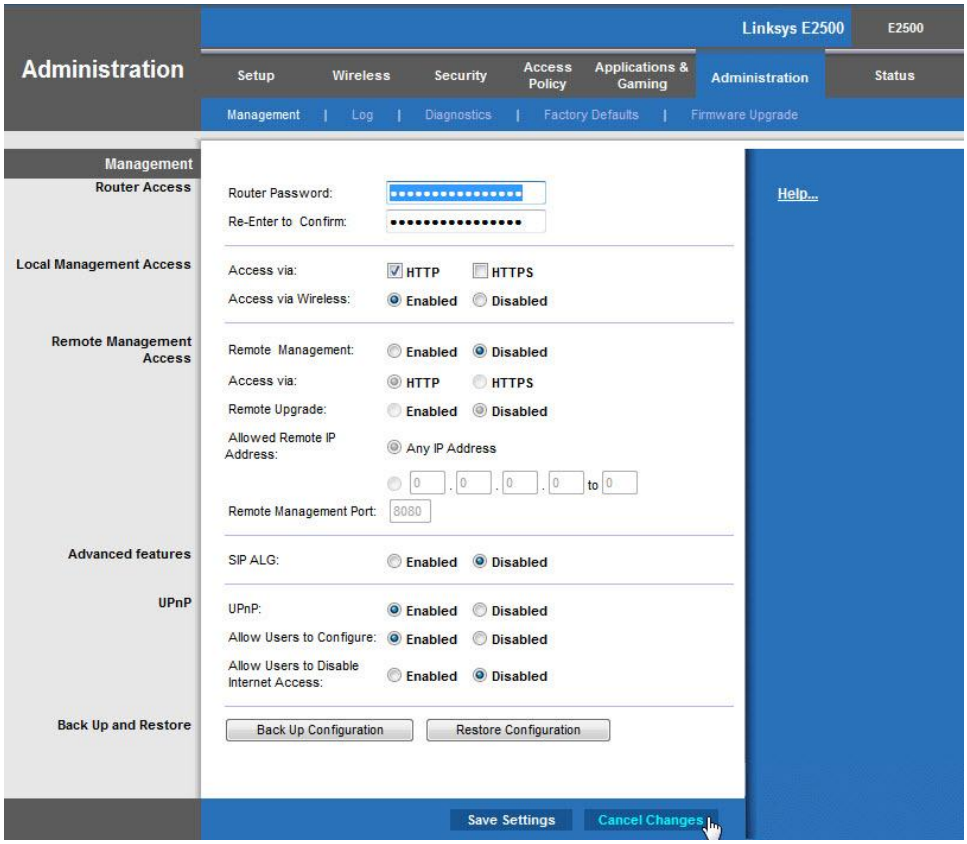
Was the ping successful?

Step 10

From computer 1, click the **browser** so it is activated.

Click **Administration** on the main tab bar.

The “Management” screen appears.



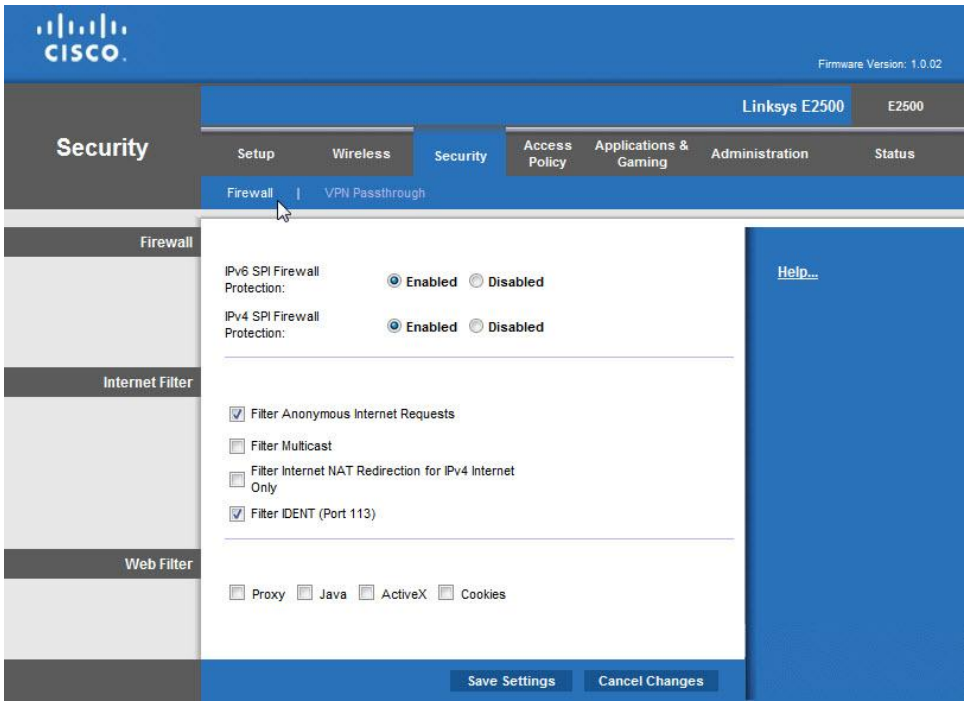
Highlight the Router Password and type **ITEv5.0**. Type the same password in Re-Enter to Confirm.

Click **Cancel Changes**. Do not save the new password.

Click **Security** on the main tab bar.

Step 11

The “Firewall” screen appears.



By default, SPI Firewall Protection is Enabled.

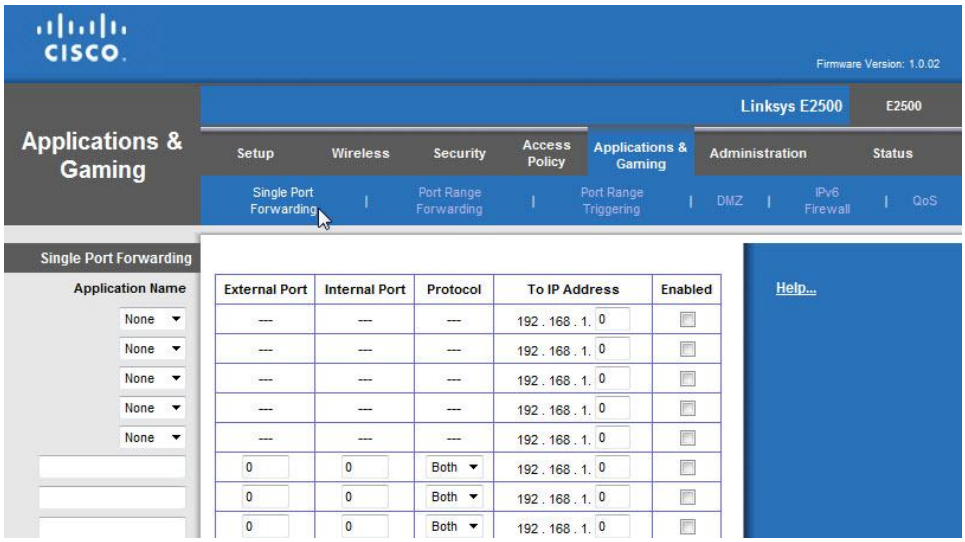
What Internet Filters are available?

What Web Filters are available?

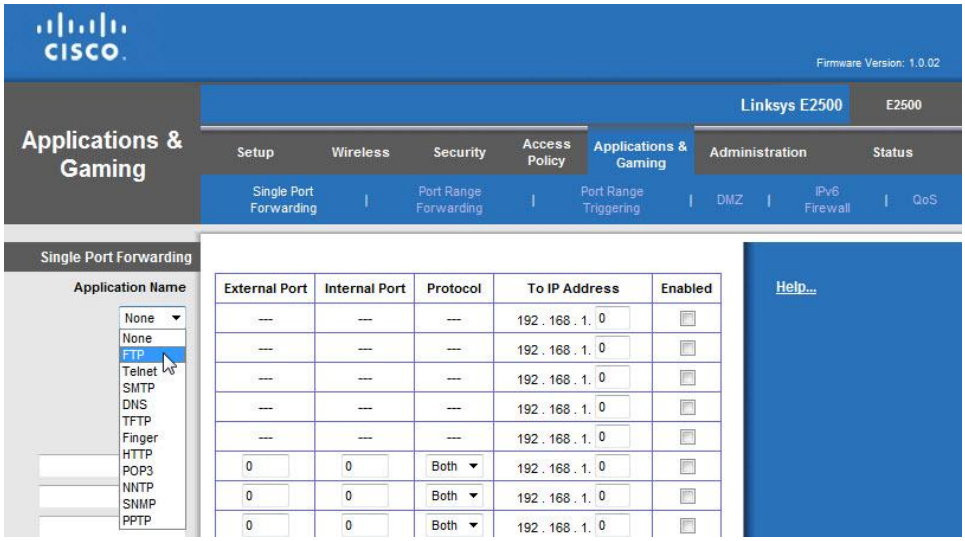
Click **Applications & Gaming** on the main tab bar.

Step 12

The “Applications & Gaming” screen appears.

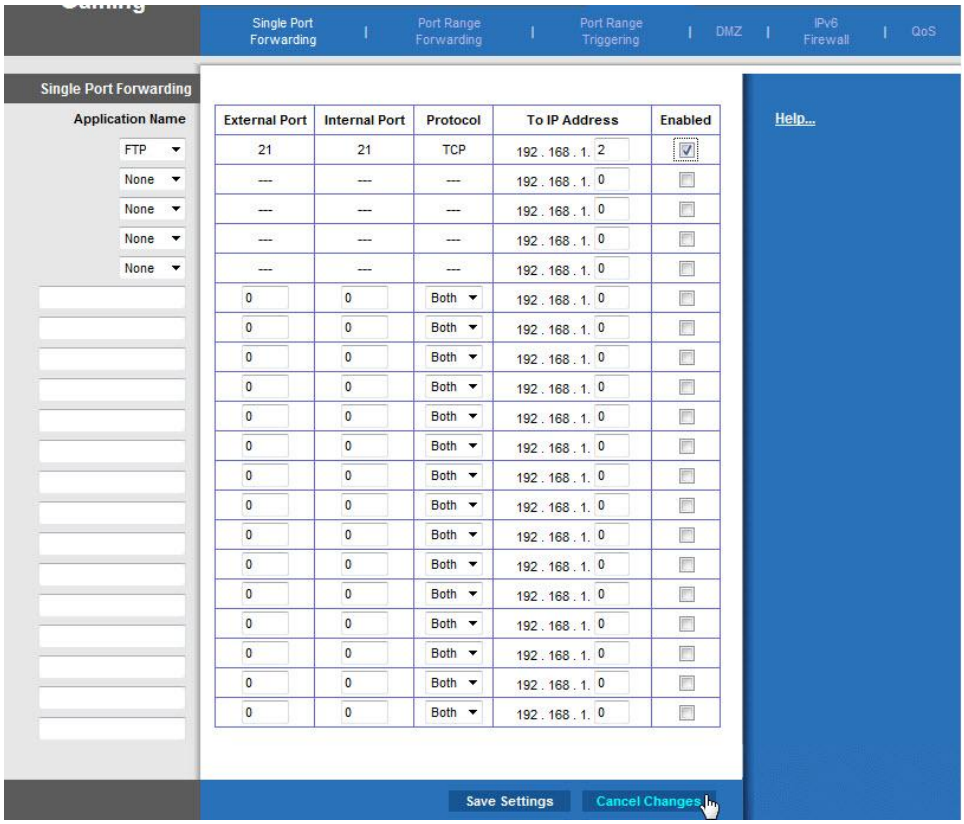


Click **Single Port Forwarding**.



To forward an otherwise blocked port to a specific computer, select **Application Name** > **FTP**.

Type the last octet of the IP address for the computer and then click **Enabled** checkbox.

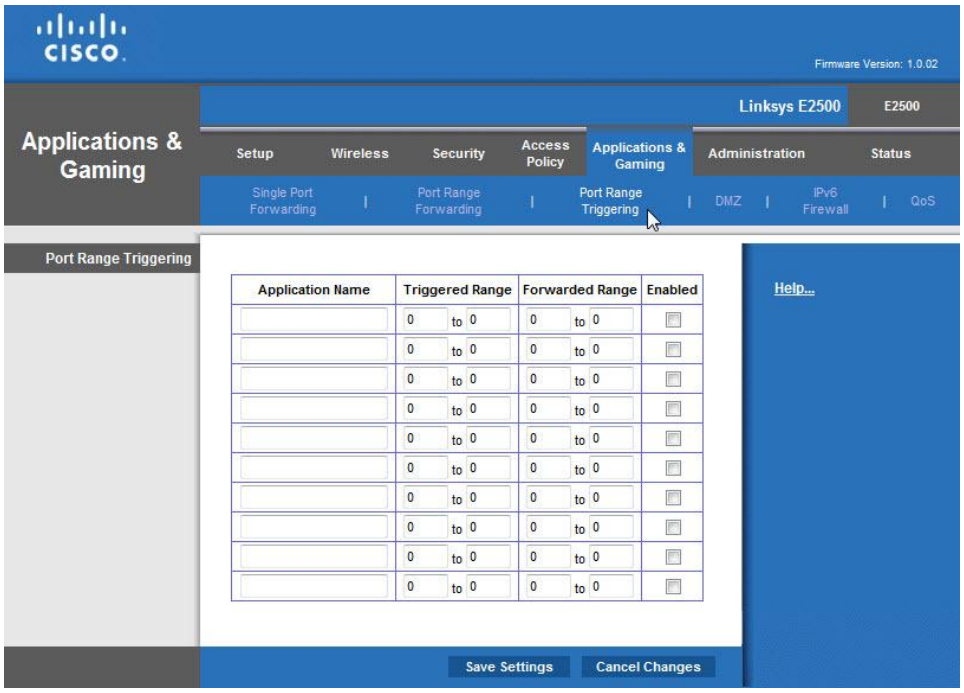


Click **Cancel Changes**. Do not save the new setting.

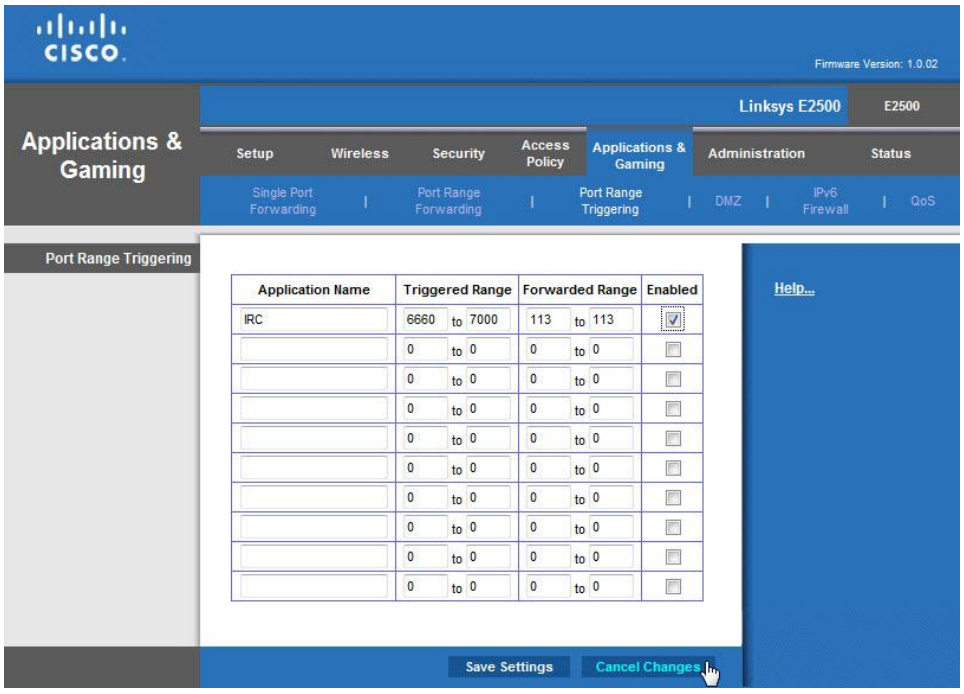
Click **Port Range Triggering**.

Step 13

The “Port Range Triggering” screen appears.



To open an otherwise blocked port, type in the application name **IRC**. Then type the Triggered Range **6660 to 7000**, Forwarded Range **113 to 113** and then click **Enabled** checkbox.

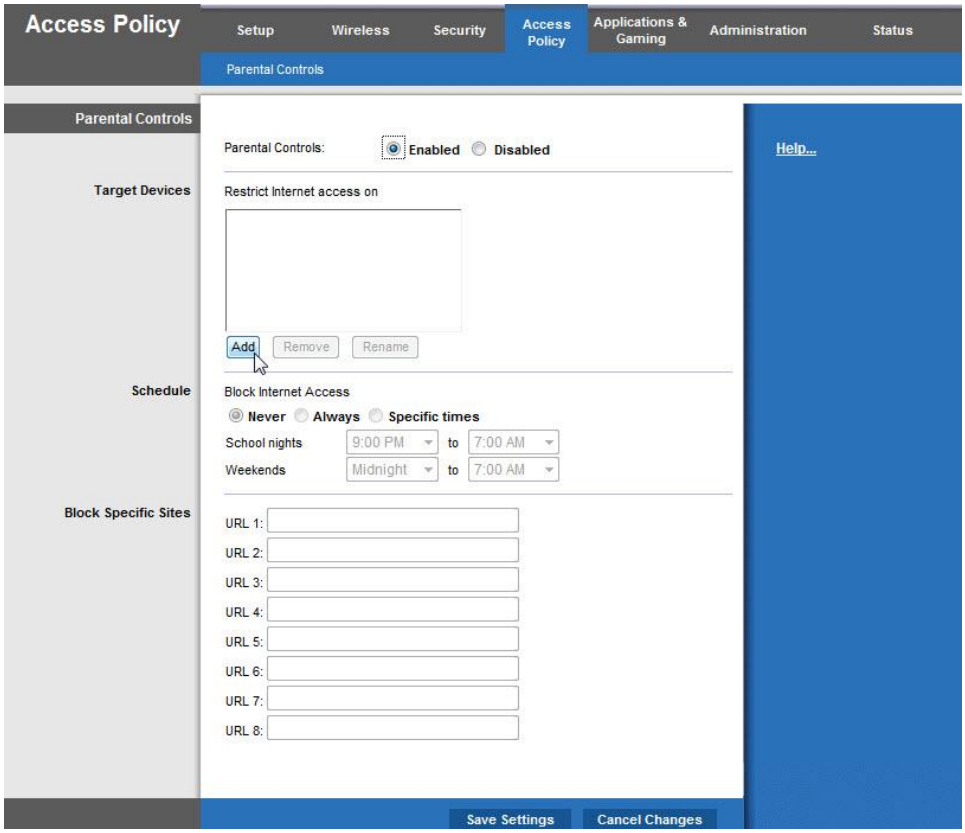


Click **Cancel Changes**. Do not save the new setting.

Click **Access Policy**.

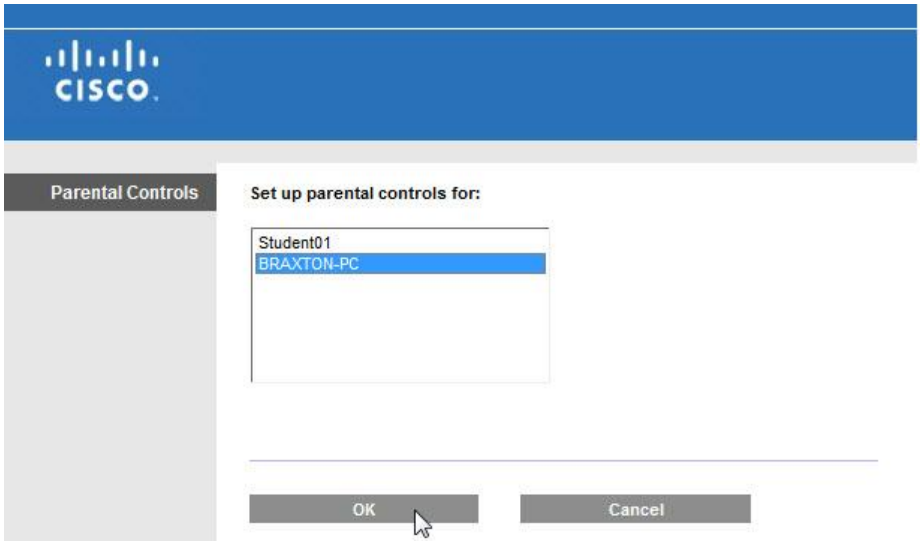
Step 14

The “Parental Controls” screen appears.



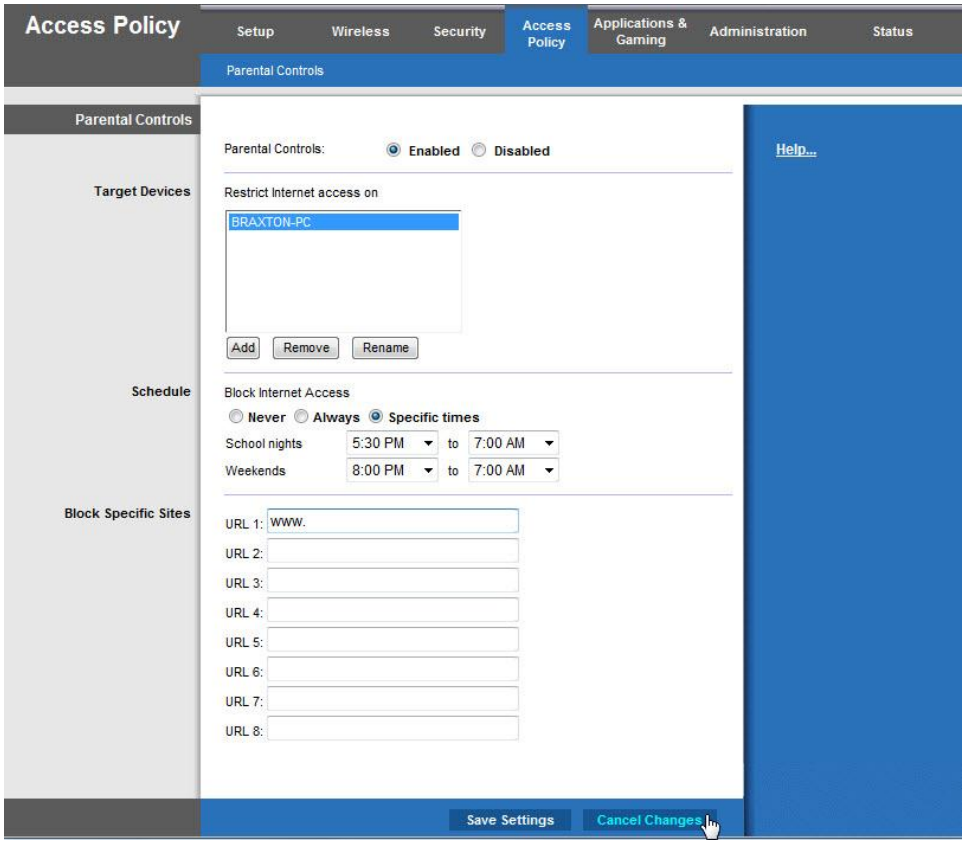
Select **Enable > Add**.

The “Set up parental control for:” window opens.



Select a computer name, **Computer2 > OK**.

The “Parental Controls” screen re-appears.



Set a schedule to block Internet access.

Select **Specific times**.
School nights: **5:30 PM to 7:00AM**
Weekends: **8:00 PM to 7:00 AM**

Block specific sites: type in the website URL.

Click **Cancel Changes**.

Step 15

From computer 1, click **Wireless** tab.

Click **Wireless MAC Filter** > **Disable** > **Save Settings > Continue**.

Click **Wireless Security** > **Disable** > **Save Settings > Continue**.

Click **Basic Wireless Settings** > **Disable** > **Save Settings > Continue**.