

Configure “Router 1”

Reset to Factory Default

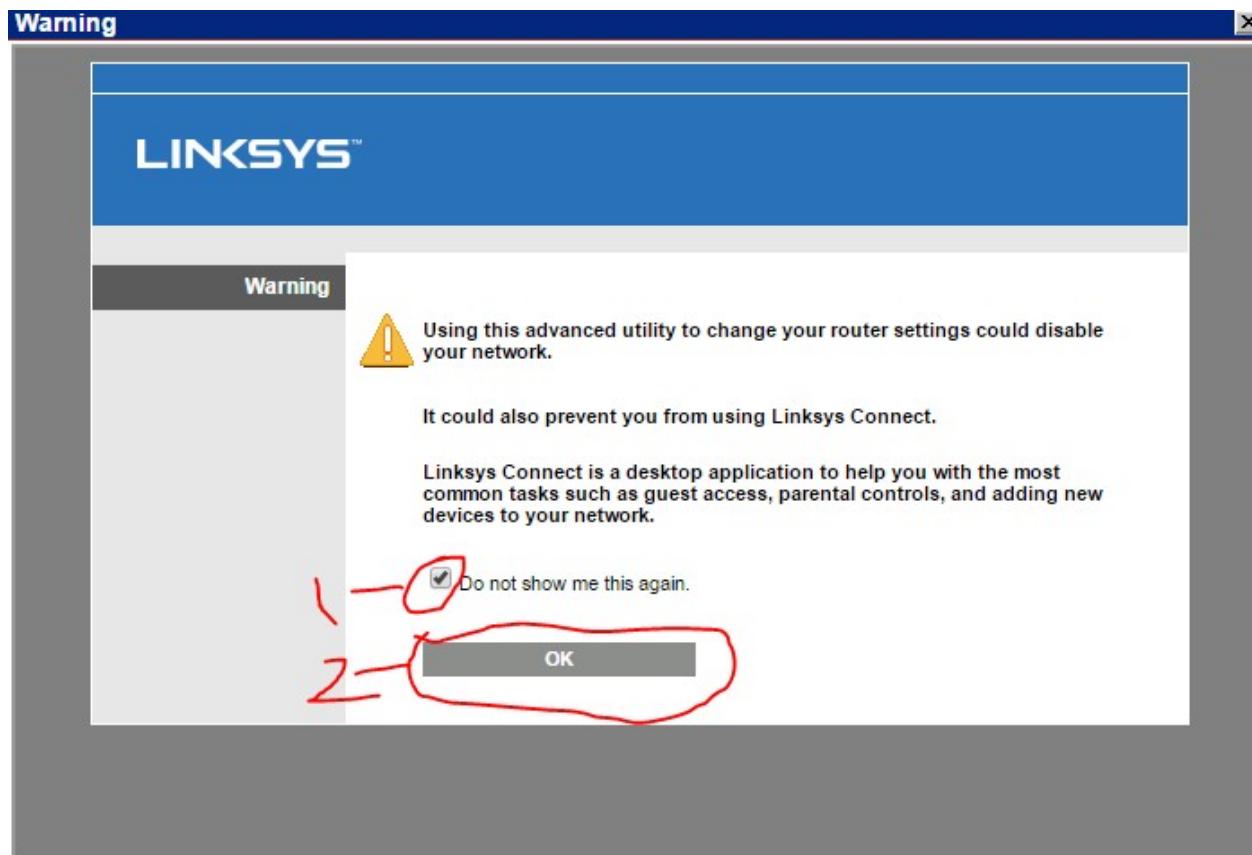
1. Reset the router to factory defaults.

Connect to the router’s management interface:

1. Type 192.168.1.1 in your browser’s address bar.

The screenshot shows the initial setup screen for the Linksys E2500. At the top left is the "LINKSYS™" logo. In the center, there's a large image of the router and the text "Welcome to Linksys E2500". To the right, a callout box contains the text: "The fastest and easiest way to set up your Linksys E2500 is to use the Linksys Connect software, available on your router CD.. Use Linksys Connect to set up a secure wireless network and access all of the following Linksys E2500 features:". Below this are four feature boxes: "Quick and Easy Setup" (Get connected in three easy steps), "Wireless Management" (Access your settings anytime), "Guest Access" (Give visitors access to the Internet), "Parental Controls" (Keep your Internet access family friendly), and "Network Connectivity" (Add computers and other devices to your network). At the bottom is a blue button with a house icon and the text "Click here to install Linksys Connect". A red oval highlights the text "Continue with an open and unsecured network (not recommended)" located just below the "Click here" button.

The screenshot shows the second step of the setup wizard. The title "Network not secure" is displayed above a shield icon with a lock symbol. The main message in the center says: "IMPORTANT: YOUR WIRELESS NETWORK IS CURRENTLY UNSECURED AND OPEN TO UNAUTHORIZED USERS. TO PROTECT YOUR PRIVATE DATA, YOU SHOULD SECURE YOUR NETWORK." Below this, it states: "To secure your wireless network, use Linksys Connect, available on your router CD. It automatically sets up a secure wireless network and allows you to access all of the Linksys E2500 features." At the bottom is a blue button with a house icon and the text "Click here to install Linksys Connect". A red checkmark is placed next to the checkbox in the following text: "I understand that my network is currently open and not secure. I would like to manually configure my router's security settings." Two red arrows point from the bottom of the previous screenshot's red oval to this text and the "Continue" button. The "Continue" button is highlighted with a red oval.



Login to the router's management interface:

Username: admin

Password: admin



Configure Router IP Addresses

The screenshot shows a router's web-based configuration interface. A red hand-drawn arrow labeled '1' points to the 'Setup' tab at the top left. Another red hand-drawn arrow labeled '2' points to the 'Static IP' dropdown menu. A red curly brace labeled '3' groups the 'Internet IP Address', 'Subnet Mask', 'Default Gateway', and 'DNS 1' fields, all of which have been set to 10.10.10.10. A red curly brace labeled '4' groups the 'IP Address', 'Subnet Mask', and 'Router Name' fields, all of which have been set to 192.168.254.254. A red curly brace labeled '5' groups the 'Save Settings' and 'Cancel Changes' buttons at the bottom.

Setup Wireless Security Storage Access Policy Applications & Gaming

Basic Setup | VLAN Setup | IPv6 Setup | DDNS | MAC Address Clone

English ▾

Static IP ▾

Internet IP Address: 10 . 10 . 10 . 10

Subnet Mask: 255 . 255 . 255 . 0

Default Gateway: 10 . 10 . 10 . 10

DNS 1: 10 . 10 . 10 . 10

DNS 2 (Optional): 0 . 0 . 0 . 0

DNS 3 (Optional): 0 . 0 . 0 . 0

Host Name:

Domain Name:

MTU: Auto ▾ Size: 1500

IP Address: 192 . 168 . 254 . 254

Subnet Mask: 255.255.255.0

Router Name : Linksys21042

Reboot

Save Settings Cancel Changes

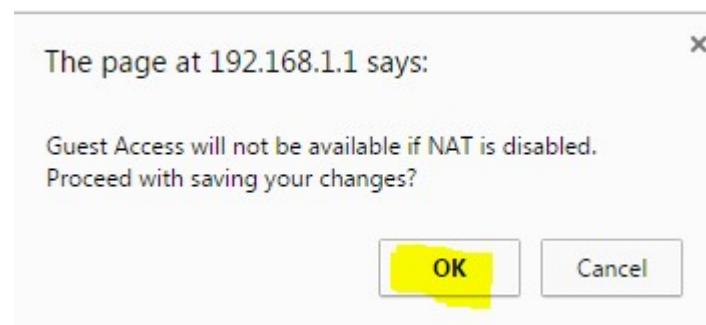
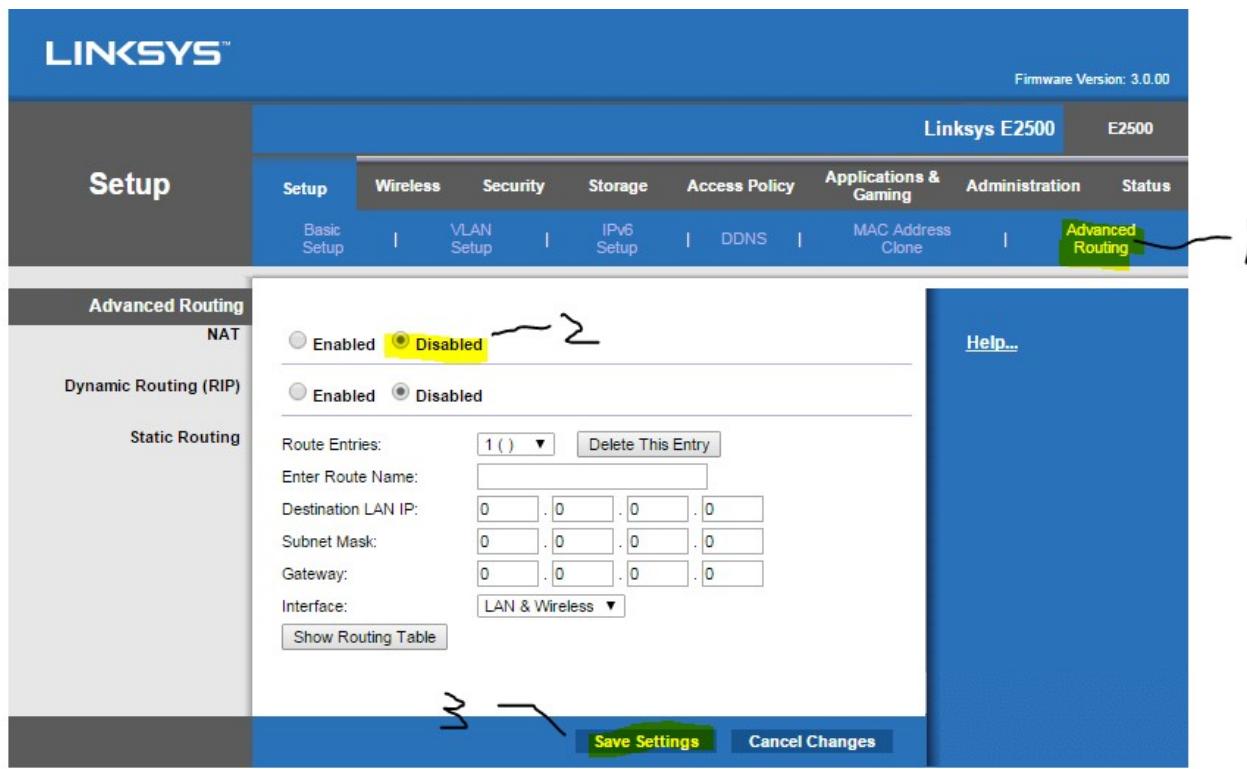
**Your settings have been successfully saved.
A system reboot is in progress and may take up to 60 seconds.**

Continue

**Wait for the router to reboot, and then reconnect to the router's new
IP address @192.168.254.254**

**Be patient as it may take a minute or two before you are able to
reconnect to the router.**

Disable NAT



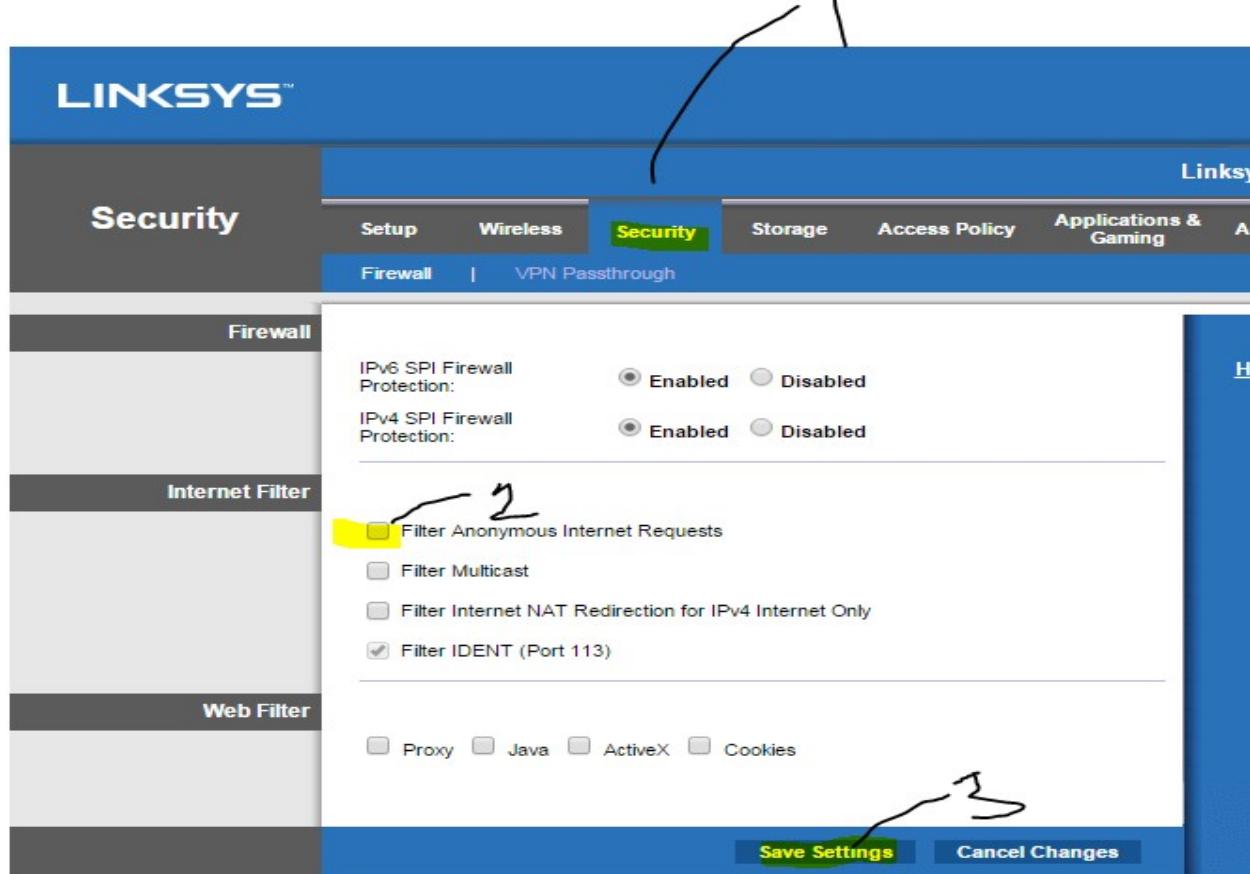
**Your settings have been successfully saved.
A system reboot is in progress and may take up to 60 seconds.**

Continue

**Wait for the router to reboot, and then reconnect to the router's new
IP address @192.168.254.254**

**Be patient as it may take a minute or two before you are able to
reconnect to the router.**

Allow anonymous internet request



Your settings have been successfully saved.

[Continue](#)

Routing Table Entry (2 marks)

From your router's "Advanced Routing" configuration page (shown below), add a routing entry that will allow you to communicate with devices on "Network segment 2". REMEMBER THIS IS THE ROUTING ENTRY THAT WILL ENABLE YOU TO SEND PACKETS TO YOUR PARTNER'S NETWORK!

Create a static route with the following values:

1. In field 1 enter an appropriate value. For example, LAN SEGMENT 2 or Joe's Network
2. In field 2 enter the network id address of the network you wish to send packet's to. Look at your topology diagram to determine the value to enter.
3. In field 3 enter the network id's subnet mask. Look at your topology diagram to determine the value to enter.
4. In field 4 enter the next hop router IP address. Look at your topology diagram for the value to enter.
5. In field 5 enter the outgoing interface for sending packets to this network. Select the appropriate interface.
6. Click the "Save Setting" and then click continue to return to the "Advanced Routing" configuration page.
7. Click the "Show Routing Table" button to display your router's routing table.
8. Ensure that the new entry exists and contains the correct values!
9. Take a screen capture of your router's routing table, highlight the entry you just created and save as **router1_routing_table.png**

The screenshot shows a web-based configuration interface for a router's routing table. At the top, there are two sets of radio buttons: 'Enabled' (gray) and 'Disabled' (green). Below them is another pair of radio buttons: 'Enabled' (gray) and 'Disabled' (green). A red arrow labeled '1' points to the first 'Enabled' radio button. Another red arrow labeled '2' points to the second 'Enabled' radio button. A red arrow labeled '3' points to the 'Delete This Entry' button. A red arrow labeled '4' points to the 'Route Entries:' dropdown menu, which shows '1 ()'. A red arrow labeled '5' points to the 'Show Routing Table' button. A red arrow labeled '6' points to the bottom right buttons: 'Save Settings' (green) and 'Cancel Changes' (blue).

Network Connectivity Tests

1. Local Connectivity Tests
 - a. ping 192.168.254.254
 - b. ping 10.10.10.1
2. Wait for your partner to complete her/his router configuration before performing remote connectivity tests.
3. Remote Connectivity Tests
 - a. ping 10.10.10.2
 - b. ping 172.16.254.254
4. NOTE: You cannot proceed until both local and remote connectivity tests have succeeded.
5. Record the following on your topology diagram:
 - a. your laptop's IP and MAC addresses
 - b. your router's (LAN) MAC address on your network topology diagram
 - c. your partner's laptop IP and MAC addresses
 - d. your partner's router (LAN) MAC address

Return to the Task1 step 8 of the “Lab7 – InLab Activities” document.