

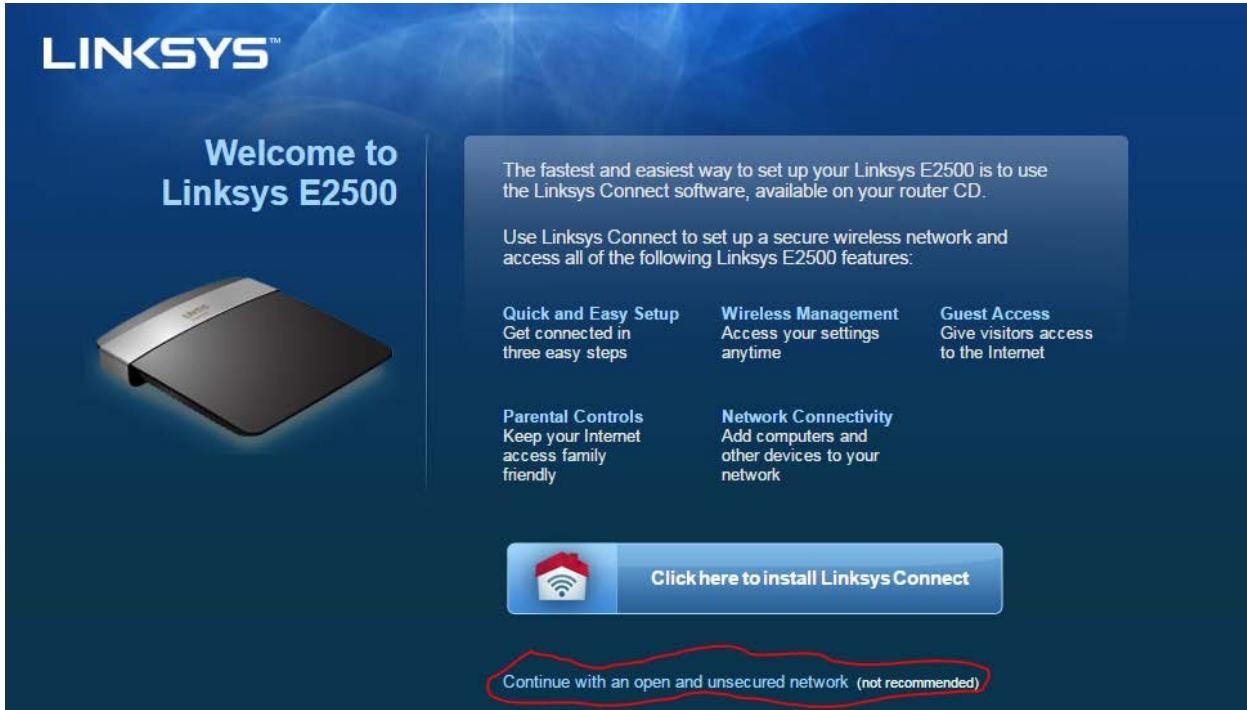
Configure “Router 2”

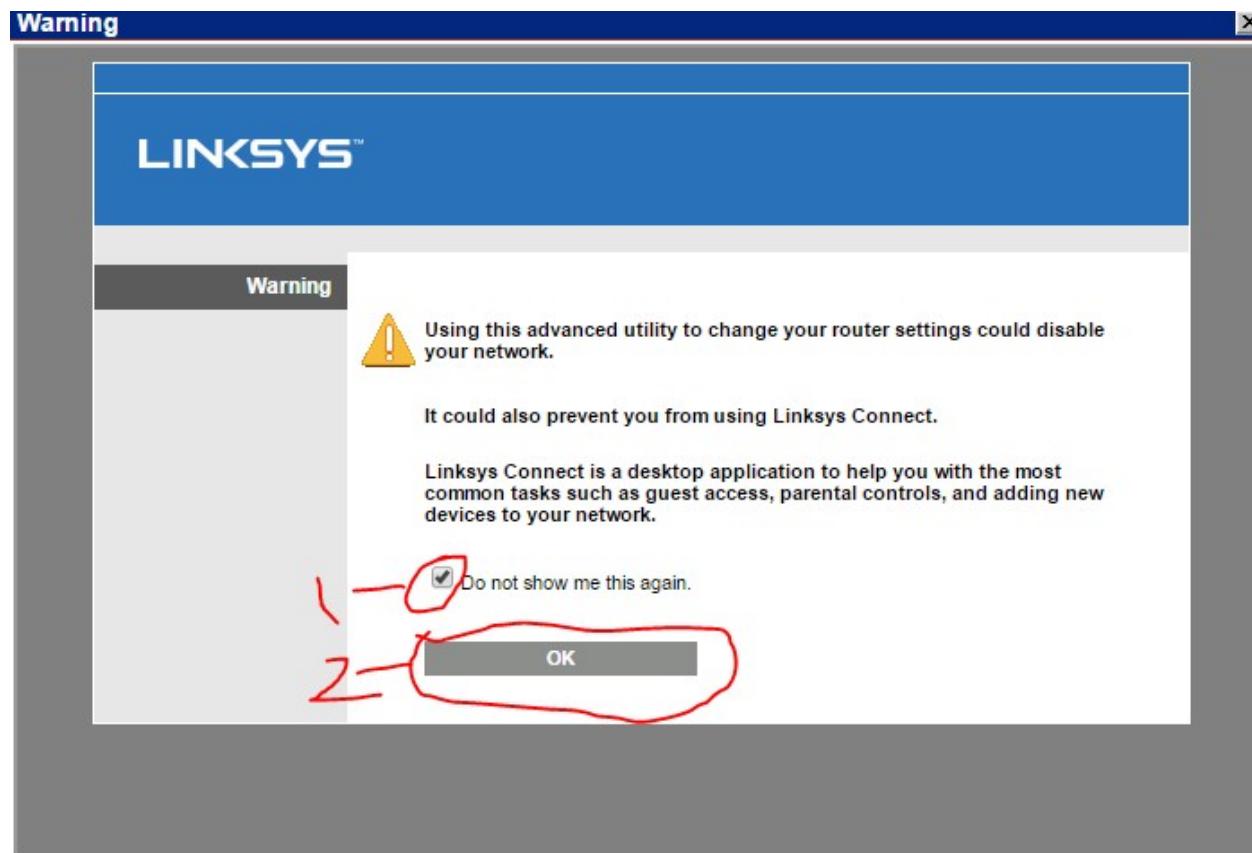
Reset to Factory Default

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.





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 arrow labeled '1' points to the 'Setup' tab in the top navigation bar. Another red arrow labeled '2' points to the 'Static IP' section. A curly brace labeled '3' groups the 'Internet IP Address', 'Subnet Mask', 'Default Gateway', and 'DNS 1' fields. A red arrow labeled '4' points to the 'IP Address' and 'Subnet Mask' fields in the 'Router' section. A red arrow labeled '5' points to the 'Save Settings' button at the bottom.

Setup Wireless Security Storage Access Policy Applications
Basic Setup VLAN Setup IPv6 Setup DDNS MAC Add Clone Gaming

English

Static IP

Internet IP Address: 10.10.10.2

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: 172.16.254.254

Subnet Mask: 255.255.255.0

Router Name: Linksys21042

Reboot

Save Settings Cancel Changes

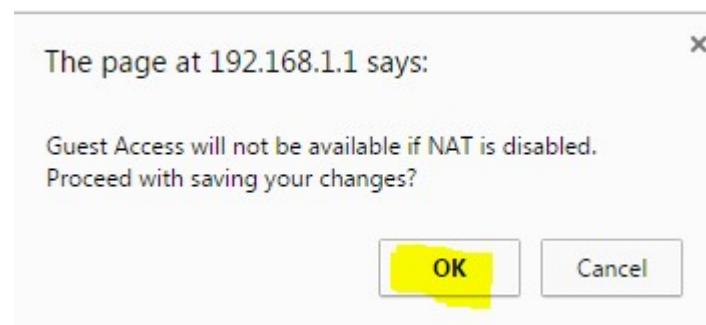
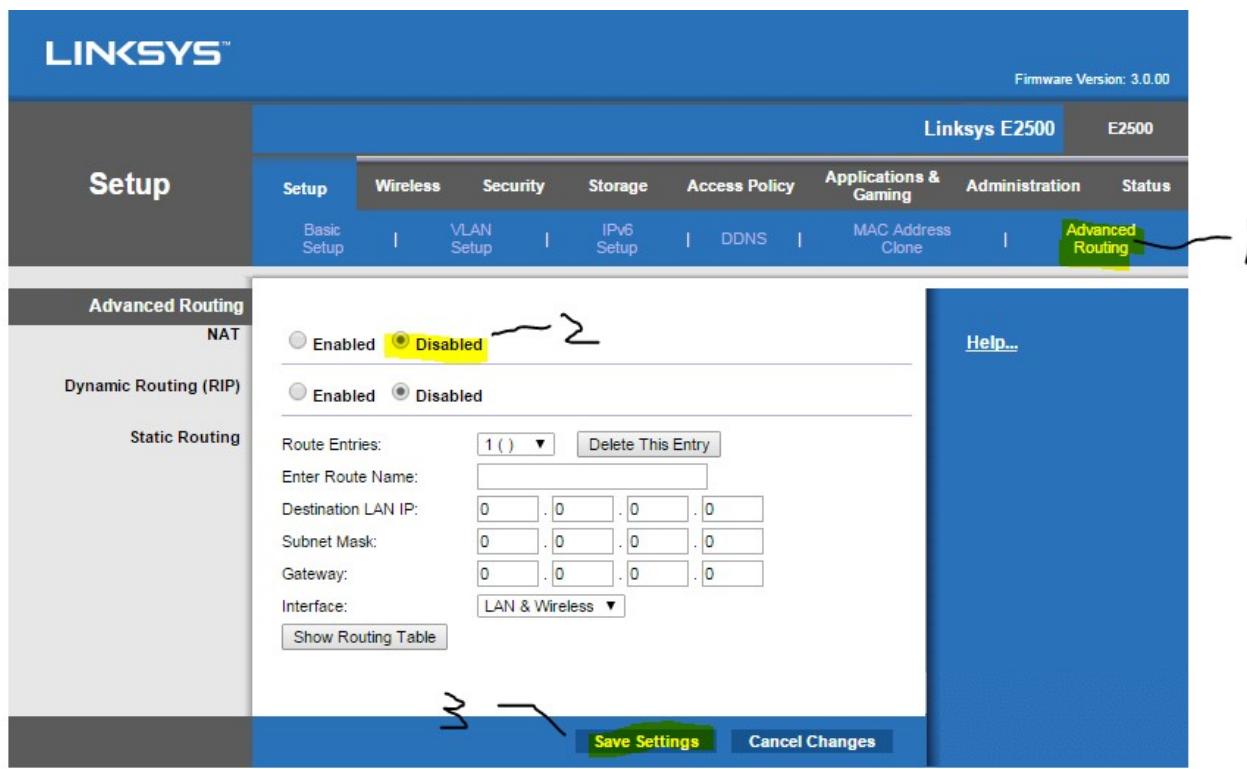
**Your settings have been successfully saved.
A system reboot is in progress and may take up to 60 seconds.**

Continue

**Wait for the router to reboot, and then reconnect to the router's new
IP address @172.16.254.254**

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

Disable NAT



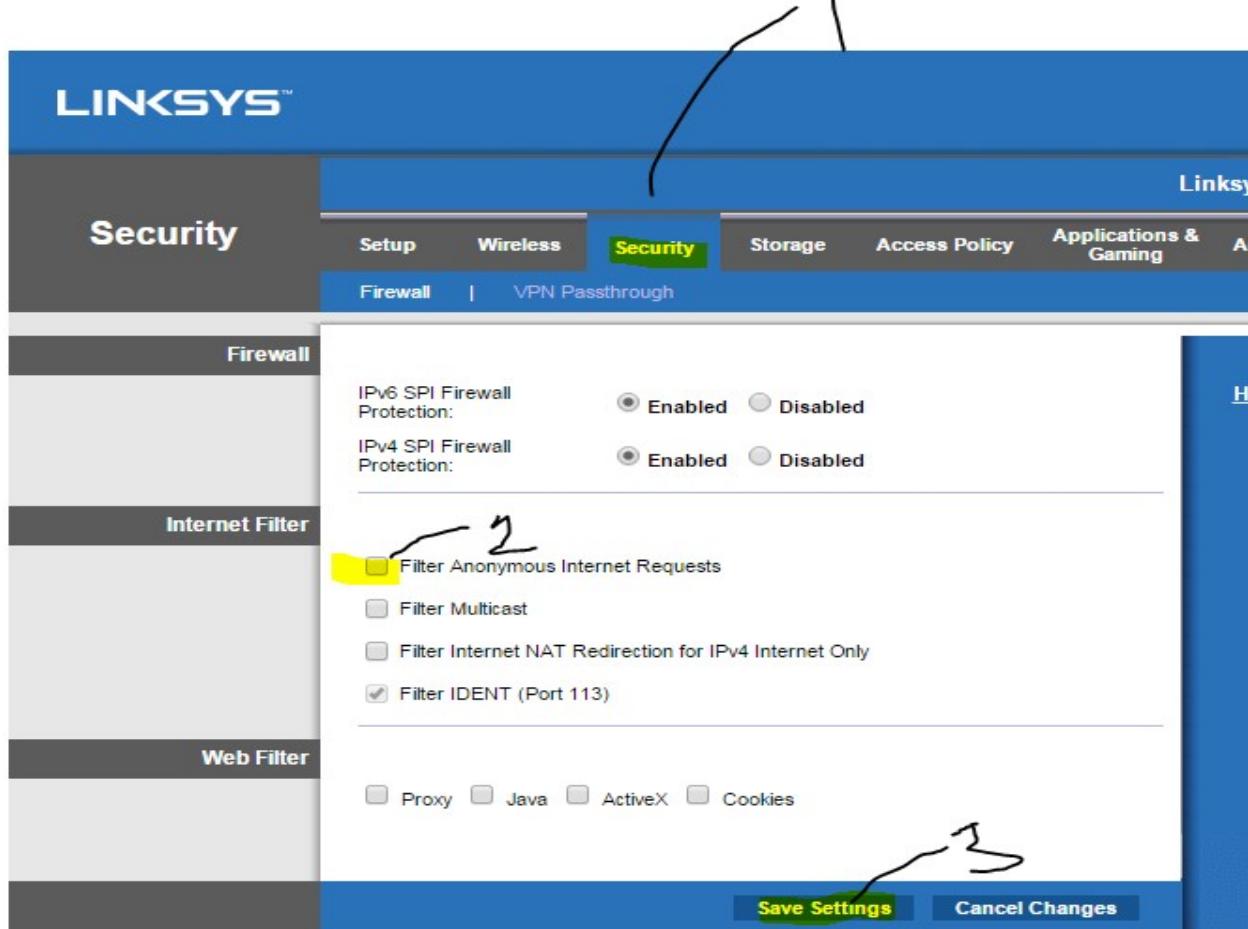
**Your settings have been successfully saved.
A system reboot is in progress and may take up to 60 seconds.**

Continue

**Wait for the router to reboot, and then reconnect to the router's new
IP address @172.16.254.254**

**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 1". 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 1 or Rosie'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 **router2_routing_table.png**

The screenshot shows a web-based router configuration interface for 'Advanced Routing'. At the top, there are two 'Enabled' radio buttons. Below them, a section for 'Route Entries' shows a dropdown menu set to '1 ()' and a 'Delete This Entry' button. A red arrow labeled '1' points to the dropdown menu. The next section contains fields for 'Enter Route Name', 'Destination LAN IP', 'Subnet Mask', 'Gateway', and 'Interface'. Red arrows labeled '2', '3', '4', and '5' point to the 'Destination LAN IP', 'Subnet Mask', 'Gateway', and 'Interface' fields respectively. A red arrow labeled '6' points to the 'Show Routing Table' button at the bottom left. At the very bottom, there are 'Save Settings' and 'Cancel Changes' buttons, with 'Save Settings' being highlighted by a red box.

Network Connectivity Tests

1. Local Connectivity Tests
 - a. ping 172.16.254.254
 - b. ping 10.10.10.2
2. Wait for your partner to complete her/his router configuration before performing remote connectivity tests.
3. Remote Connectivity Tests
 - a. ping 10.10.10.1
 - b. ping 192.168.254.254
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.