

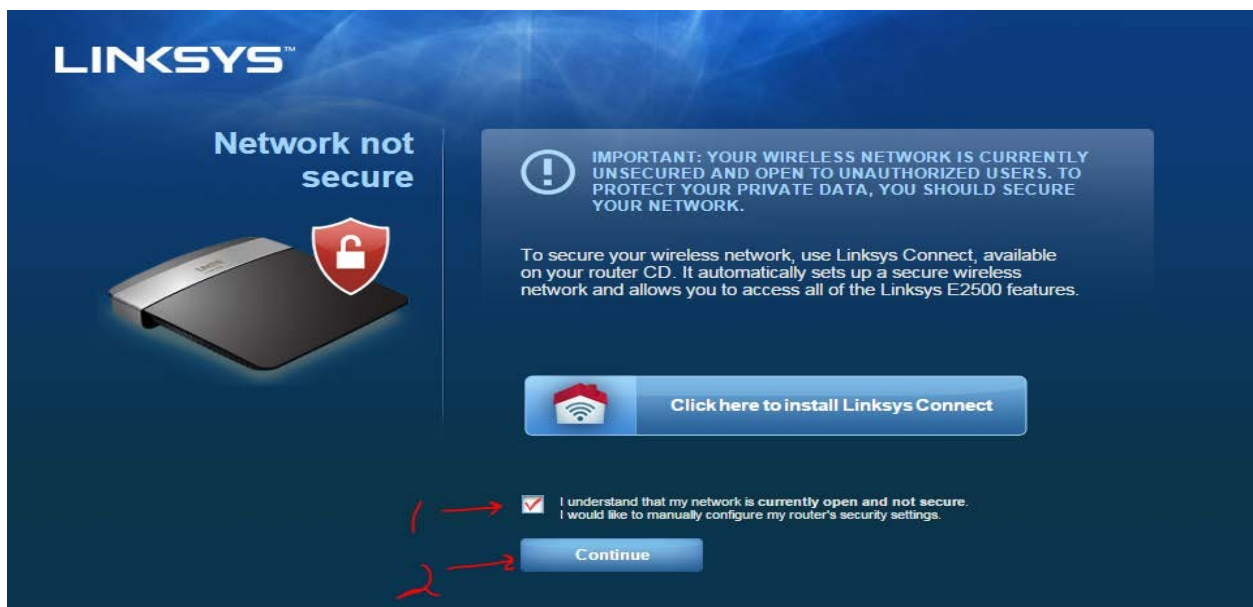
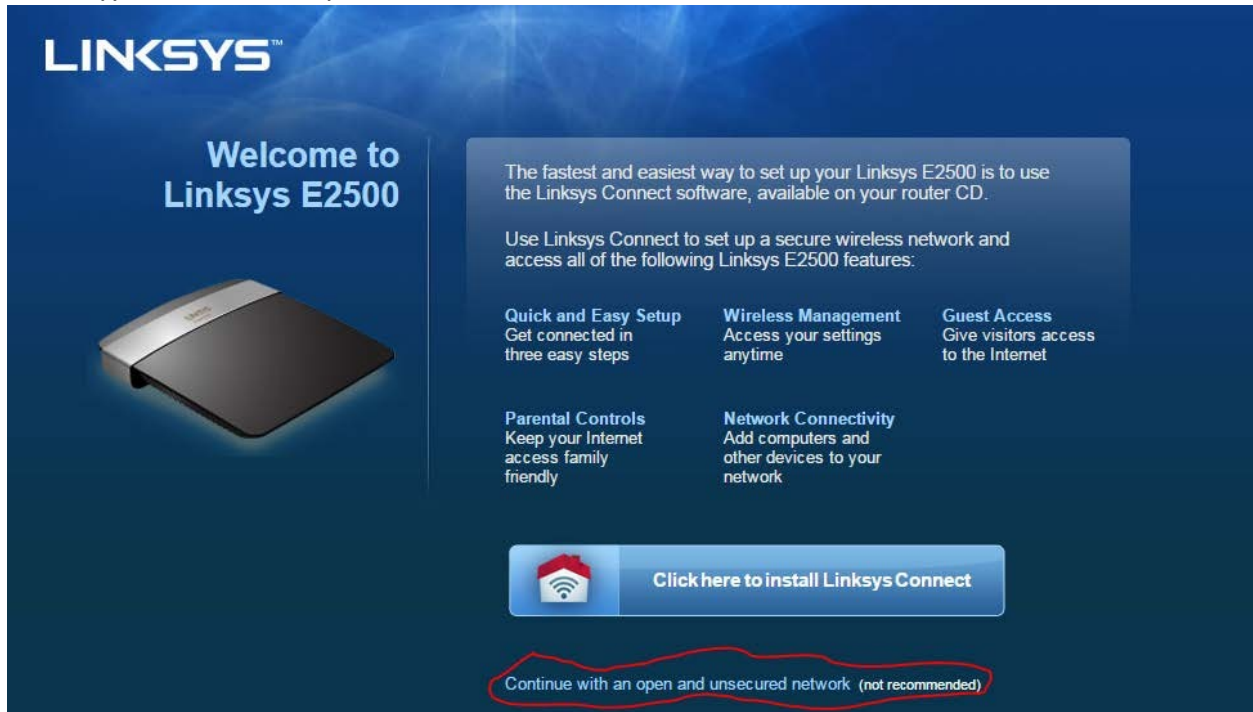
Configure “Router 2”

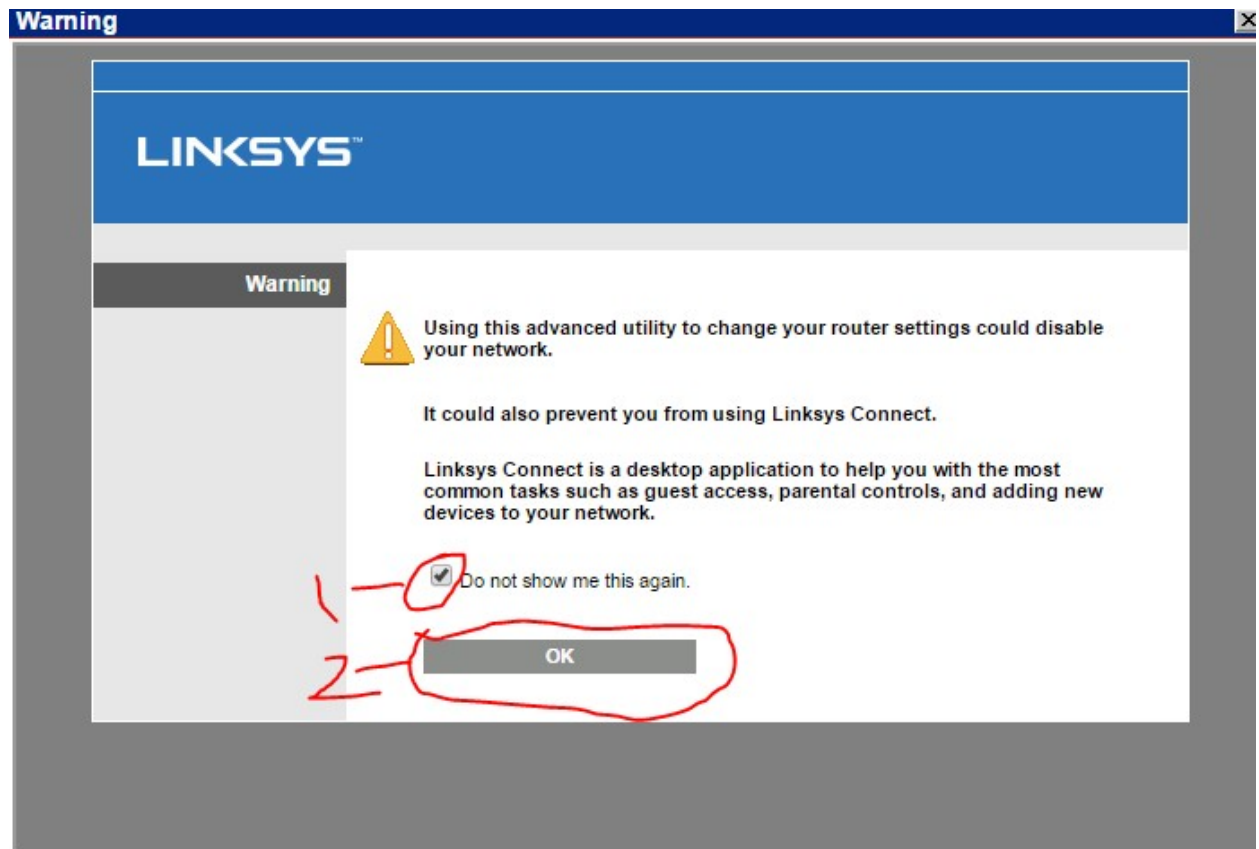
Reset to Factory Default

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.

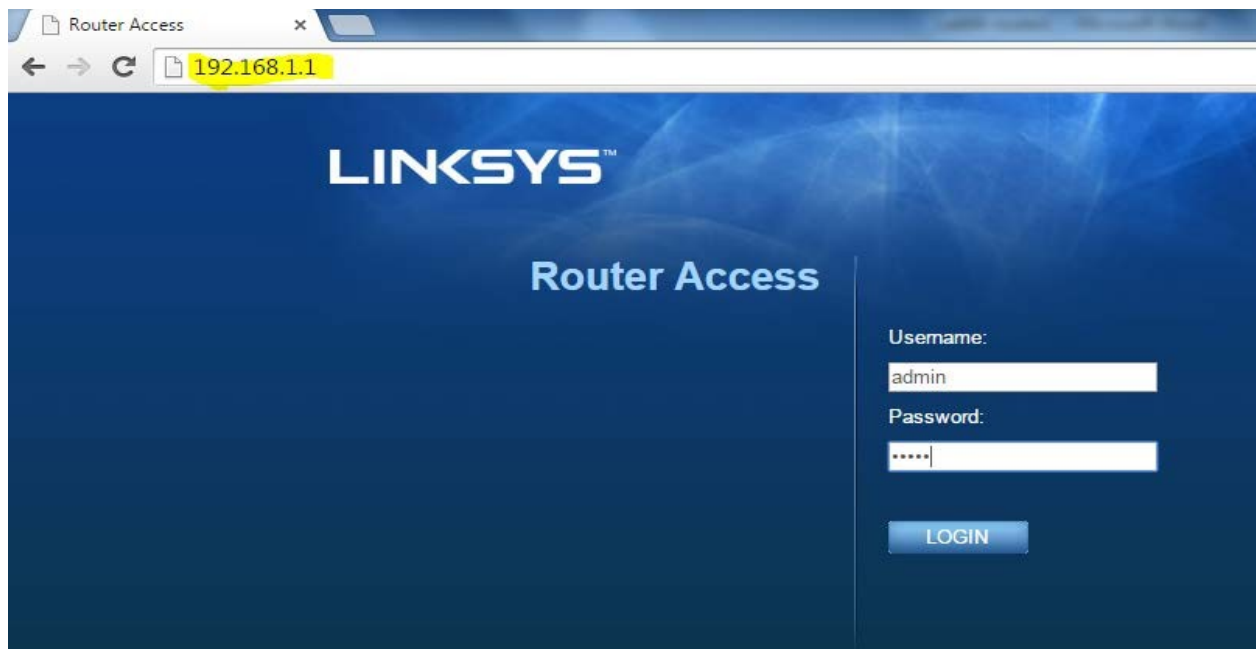




Login to the router's management interface:

Username: admin

Password: admin



Configure Router IP Addresses

1 **Setup** | Wireless | Security | Storage | Access Policy | Applications Gaming

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

English ▼

2 **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

4

IP Address: 172 . 16 . 254 . 254

Subnet Mask: 255.255.255.0 ▼

Router Name: Linksys21042

5

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

LINKSYS™ Firmware Version: 3.0.00

Linksys E2500 E2500

Setup

Basic Setup | VLAN Setup | IPv6 Setup | DDNS | MAC Address Clone | **Advanced Routing** | Status

Advanced Routing

NAT

Dynamic Routing (RIP)

Static Routing

☐ Enabled ☒ Disabled

☐ Enabled ☒ Disabled

Route Entries: 1 () ▼ Delete This Entry

Enter Route Name:

Destination LAN IP: . . .

Subnet Mask: . . .

Gateway: . . .

Interface: LAN & Wireless ▼

Show Routing Table

Save Settings Cancel Changes

The page at 192.168.1.1 says:

Guest Access will not be available if NAT is disabled.
Proceed with saving your changes?

OK Cancel

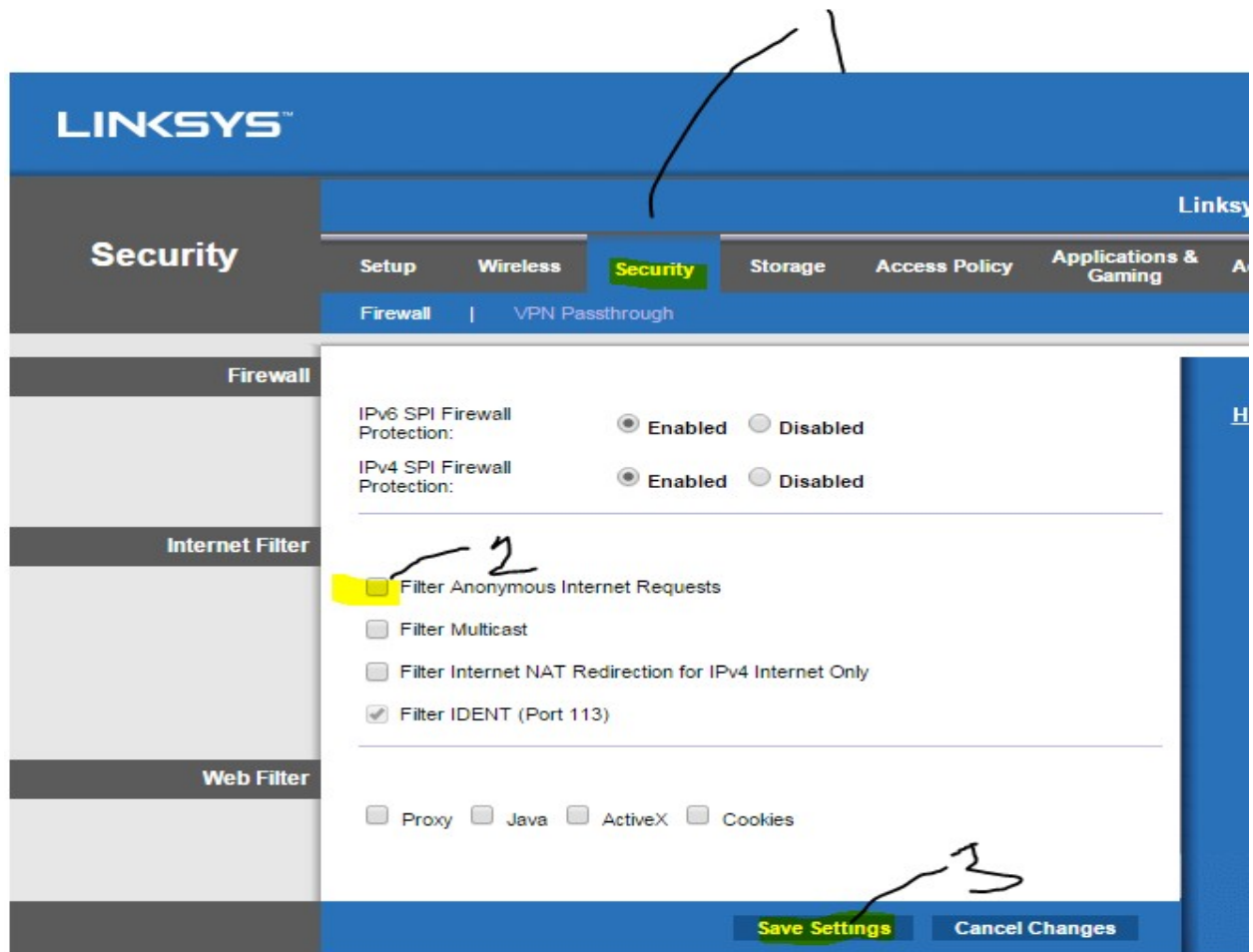
**Your settings have been successfully saved.
A system reboot is in progress and may take up to 60 seconds.**

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 the 'Advanced Routing' configuration page. At the top, there are two sections, each with 'Enabled' and 'Disabled' radio buttons, both currently set to 'Disabled'. Below these is the 'Route Entries' section, which includes a dropdown menu showing '1 ()' and a 'Delete This Entry' button. The form contains the following fields: 'Enter Route Name:', 'Destination LAN IP:', 'Subnet Mask:', 'Gateway:', and 'Interface:'. Each of these fields is highlighted in yellow. To the left of the form, there are handwritten red numbers 1 through 6 with arrows pointing to the corresponding fields: 1 points to 'Enter Route Name:', 2 points to 'Destination LAN IP:', 3 points to 'Subnet Mask:', 4 points to 'Gateway:', 5 points to 'Interface:', and 6 points to the 'Show Routing Table' button. At the bottom of the page, there are two buttons: 'Save Settings' (highlighted in green) and 'Cancel Changes'.

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.