Module 3.2: Cyberchallenge #2: router setup

router-gateway challenge

1. setup your router with an external address in the form 10.14.90.x and write this on the board
2. setup a LAN network with internal network scope 192.168.6.1 with 254 hosts
3. connect one of the pi400 to your LAN using an ethernet cable
4. find the IP address for the pi400 inside your network
5. use the DHCP setting to give it a fixed address
6. the pi has a web server built in on port 80, setup inbound port mapping (forwarding)
7. challenge your neighbors out in the cruel internet to view your web page
8. *enable port forwarding for ssh and challenge them to get into your pi 400 and create a folder with their name on it and a hidden message inside that folder (optional)*
9. close off ssh access when you are done and create a hidden wifi network
10. disconnect the pi 400 from the ethernet and connect to your access point using wifi on the pi 400
11. use access controls to block the pi then unblock it using MAC address filtering
12. do the same for your laptop, blocking by MAC address
13. use content controls to block a named site for the pi 400 and test
14. use timed access to enable then disable the pi 400 on the wifi network
15. challenge your neighbors to find your wifi network based on name using our lab macbooks (the new thin ones) or your laptop (apple silicon)
16. enable a guest wifi network and see if anyone can join that
17. after they record the MAC address of your access point, challenge them to find your hidden network using the same MAC address
18. on the lab macbooks, use wifi scanning tools to scan the elab wifi networks
19. go on a wifi hunt around the campus looking for wifi networks
20. map out coverage areas using the lab macbooks
21. search for access points and identify the vendor from the MAC address (DO NOT BREAK IN)
22. record the MAC address for car wifi units, and use OUI lookup to determine the vendor

Migrated from Apple Server Wiki. Original page ID: K3h1o6Q

Revision #2
Created 2026-09-29 15:59:55 UTC by Admin
Updated 2026-09-29 16:22:57 UTC by Admin