



## **Connecting and Configuring a Home Network**

### ***Part 1: Connect the Devices***

*The work area shows the interior of Natsumi's house. The goal is to connect all the labeled devices in the correct order.*

#### ***Step 1: Connect the coaxial cables.***

*Natsumi's cable company delivers internet and video services through a coaxial cable connected to an outlet in her home. A splitter separates the internet data service from the video service. The internet service connects to the cable modem, and the video service connects to the television.*

- 1. open Connections in Network Components.*
- 2. Select the Coaxial cable (blue zigzag icon).*
- 3. Connect Coaxial1 from the splitter to Port 0 on the cable modem.*
- 4. Connect Coaxial2 from the splitter to Port 0 on the television.*
- 5. Turn the TV status ON to verify the connection.*

## Lewis Joseph Feik

### Switch Basic Bootcamp

#### **Step 2: Connect the network cables.**

*Natsumi has two PCs without wireless adapters, so they are connected with Ethernet cables. The home wireless router acts as the central hub of the network.*

1. *Select the Copper Straight-Through cable.*
2. *Connect the Office PC to the Home Wireless Router (FastEthernet0 → GigabitEthernet1).*
3. *Connect the Bedroom PC to the Home Wireless Router (FastEthernet0 → GigabitEthernet2).*
4. *Connect Port 1 on the Cable Modem to the Internet port of the Home Wireless Router.*

*At this point, the home network is fully connected to the internet.*

#### **Part 2: Configure the Wireless Router**

##### **Step 1: Access the home wireless router GUI.**

*Using the Office PC, DHCP was enabled to obtain an IP configuration automatically. The default gateway address was identified as the Home Wireless Router's address. Entering this address in the web browser allowed access to the router's GUI. The default login credentials were admin/admin.*

##### **Step 2: Configure basic settings.**

- *Under Setup > Network Setup, the maximum number of DHCP users was limited to 10.*
- *Under Administration, the default password was changed to MyPassword1!.*

##### **Step 3: Configure a wireless LAN.**

- *The 2.4 GHz network was enabled.*
- *The SSID was renamed to MyHome.*
- *Under Wireless Security, WPA2 Personal was selected and the passphrase was set to MyPassPhrase1!.*

Lewis Joseph Feik  
Switch Basic Bootcamp

### **Part 3: Configure IP Addressing and Test Connectivity**

#### **Step 1: Office PC.**

The Office PC successfully loaded *skillsforall.srv*, confirming internet access.

#### **Step 2: Bedroom PC.**

DHCP was enabled and the Bedroom PC received an IP address beginning with 192. The PC also connected to *skillsforall.srv*.

#### **Step 3: Laptop.**

The laptop connected to the *MyHome* wireless network using the passphrase *MyPassPhrase1!* and successfully accessed *skillsforall.srv*.

### **Conclusion**

All devices were connected properly, the router was configured with security, and both wired and wireless hosts confirmed internet access. The task was completed successfully, and Natsumi rewarded the effort with dinner.